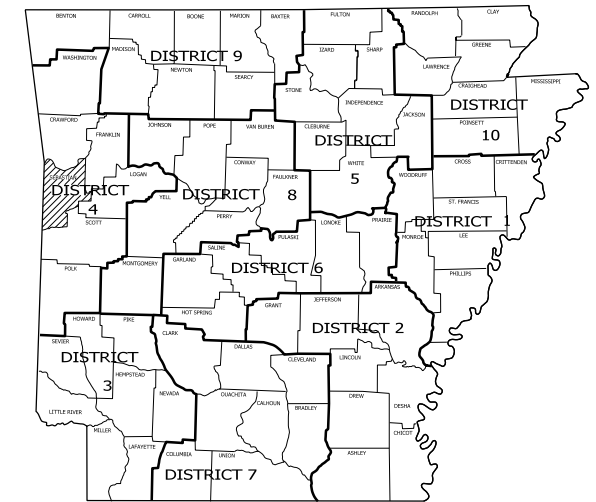


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
							JOB NO.	13
							②	I-49/HWY. 22 INTCHNG. CLEARING & GRUBING

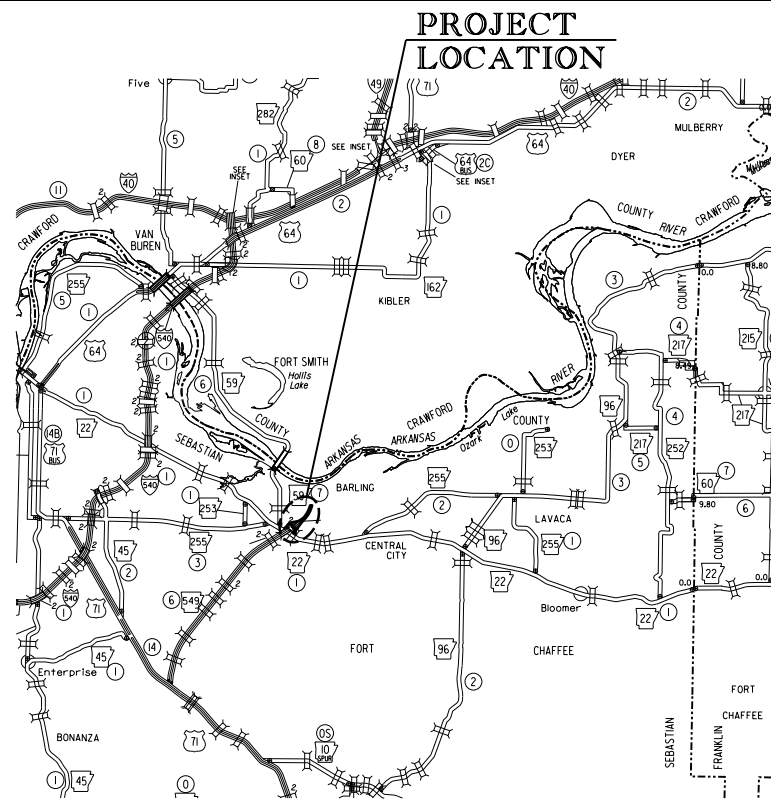
"THIS IS A FULLY CONTROLLED ACCESS FACILITY"  
**ARKANSAS DEPARTMENT OF TRANSPORTATION**  
**CONSTRUCTION PLANS**

**I-49 / HWY. 22 INTCHNG.**  
**CLEARING & GRUBBING (S)**

SEBASTIAN COUNTY  
 FED. AID PROJ. NHPP-49-26(1)  
**JOB 040900**



**ARKANSAS HIGHWAY DISTRICT 4**



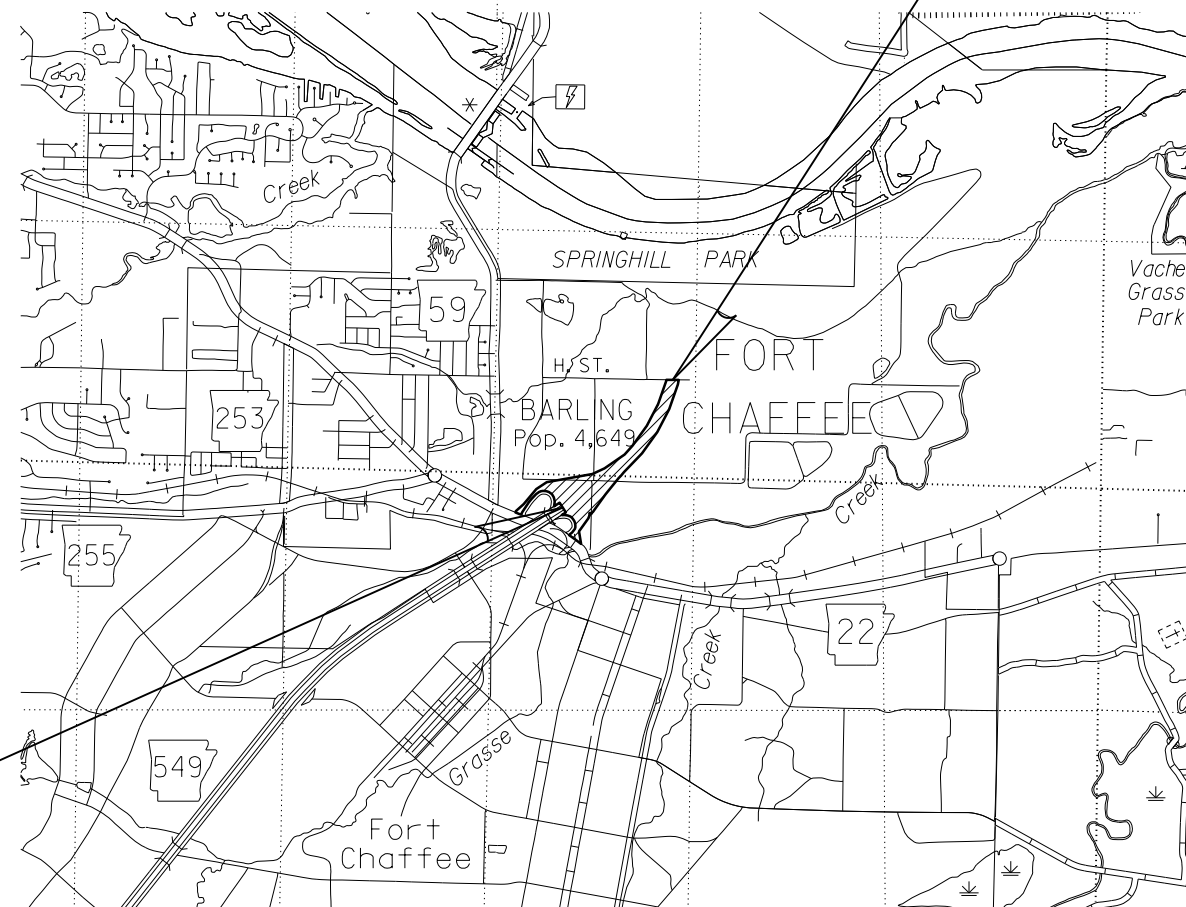
**VICINITY MAP**



STA. 146+00.00  
 END JOB 040900

NOT TO SCALE

R-31-W | R-30-W



STA. 100+00.00  
 BEGIN JOB 040900

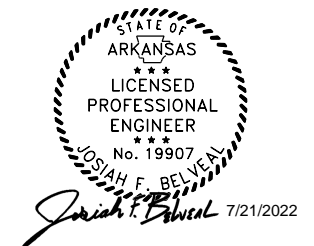
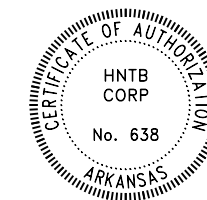
R-31-W | R-30-W

· DESIGN TRAFFIC DATA ·

DESIGN YEAR	----- 2042
2022 ADT	----- N/A
2042 ADT	----- 21,000
2042 DHV	----- 2,310
DIRECTIONAL DISTRIBUTION	----- 60%
TRUCKS	----- 29%
DESIGN SPEED	----- 70 MPH

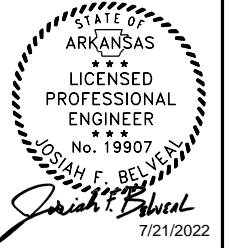
	BEGIN PROJECT	MID POINT OF PROJECT	END PROJECT
LATITUDE	N 35°19'23"	N 35°19'36"	N 35°19'56"
LONGITUDE	W 94°17'26"	W 94°17'04"	W 94°16'51"

PROJECT LENGTH COMPUTED ALONG C.L. I-49  
 GROSS LENGTH OF PROJECT 4600.00 FEET OR 0.871 MILES



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
				6	ARK.	NHPP-49-26(1)			
JOB NO.							040900	2	13

② INDEX OF SHEETS AND STANDARD DRAWINGS



**INDEX OF SHEETS**

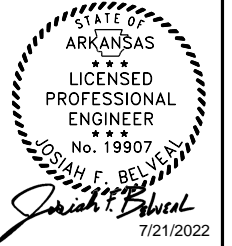
SHEET NO.	TITLE
1	TITLE SHEET
2	INDEX OF SHEETS AND STANDARD DRAWINGS
3	GOVERNING SPECIFICATIONS AND GENERAL NOTES
4 - 5	TEMPORARY EROSION CONTROL DETAILS
6 - 7	MAINTENANCE OF TRAFFIC DETAILS
8	QUANTITIES
9	SUMMARY OF QUANTITIES AND REVISIONS
10 - 13	SURVEY CONTROL DETAILS

**ROADWAY STANDARD DRAWINGS**

DRWG. NO	TITLE	DATE
TC-1	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	11-07-19
TC-3	STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION	08-12-21
TEC-1	TEMPORARY EROSION CONTROL DEVICES	11-16-17
TEC-3	TEMPORARY EROSION CONTROL DEVICES	11-03-94

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
						JOB NO.	040900	3

2 GOVERNING SPECIFICATIONS AND GENERAL NOTES



**GOVERNING SPECIFICATIONS**

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

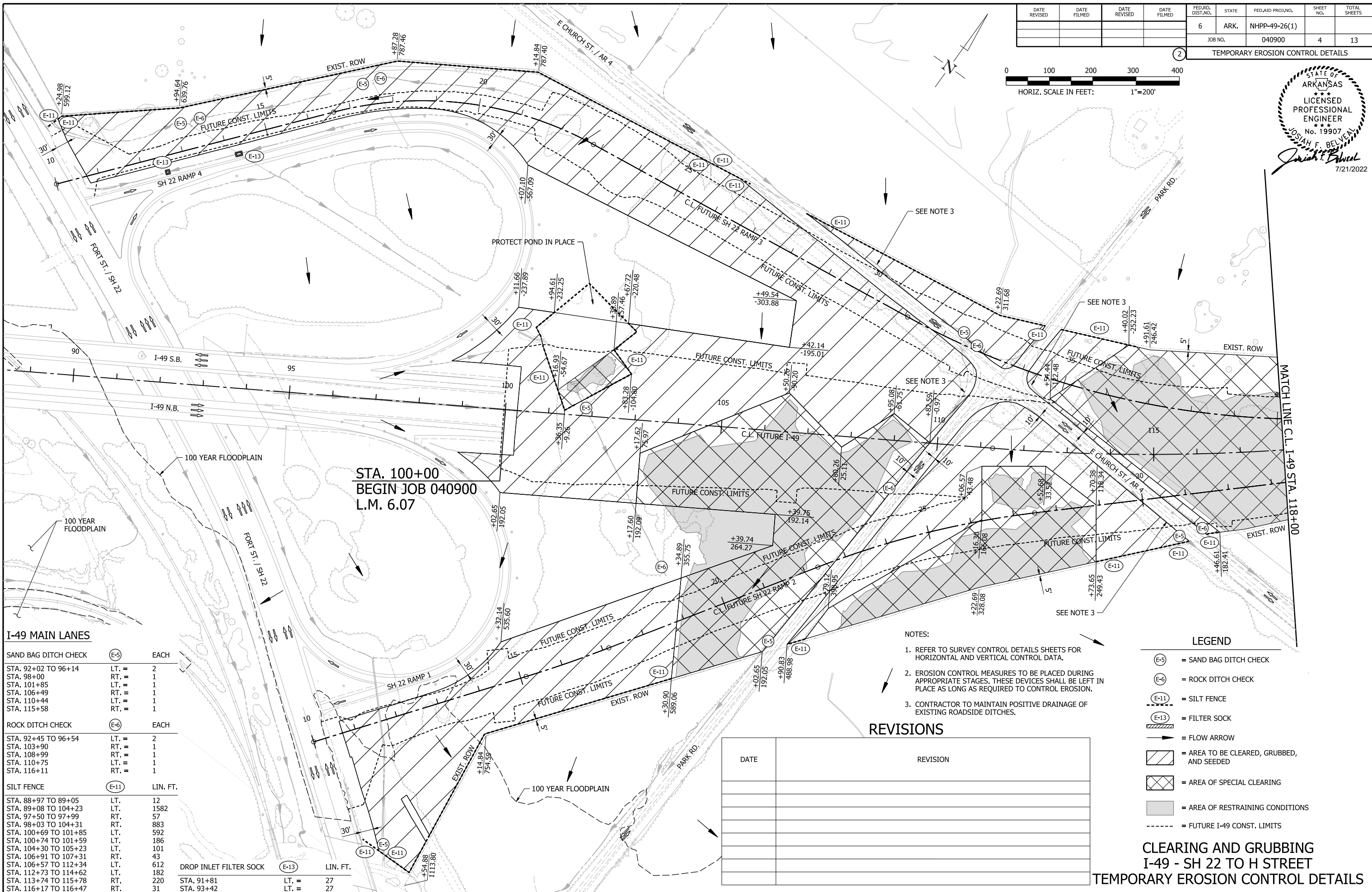
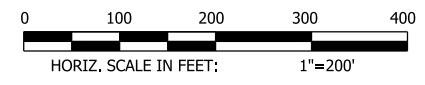
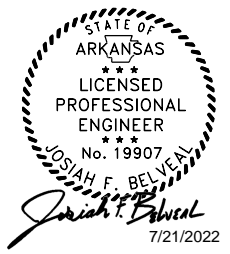
NUMBER	TITLE
ERRATA	ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
FHWA-1273	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS
FHWA-1273	SUPPLEMENT - EQUAL EMPLOYMENT OPPORTUNITY - NOTICE TO CONTRACTORS
FHWA-1273	SUPPLEMENT - SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES (23 U.S.C. 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
100-3	CONTRACTOR'S LICENSE
100-4	DEPARTMENT NAME CHANGE
102-2	ISSUANCE OF PROPOSALS
105-4	MAINTENANCE DURING CONSTRUCTION
107-2	RESTRAINING CONDITIONS
108-1	LIQUIDATED DAMAGES
108-2	WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1	PROTECTION OF WATER QUALITY AND WETLANDS
306-1	QUALITY CONTROL AND ACCEPTANCE
603-1	LANE CLOSURE NOTIFICATION
604-1	RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
620-1	MULCH COVER
621-1	FILTER SOCKS
JOB 040900	BIDDING REQUIREMENTS AND CONDITIONS
JOB 040900	CARGO PREFERENCE ACT REQUIREMENTS
JOB 040900	CLEARING AND GRUBBING - TREE REMOVAL
JOB 040900	CONSTRUCTION IN SPECIAL FLOOD HAZARD AREAS
JOB 040900	COORDINATION OF WORK
JOB 040900	DISADVANTAGED BUSINESS ENTERPRISE BIDDER'S RESPONSIBILITIES
JOB 040900	ESTABLISHING CONTRACT TIME - WORKING DAY CONTRACT
JOB 040900	EXPLOSIVE HAZARDS
JOB 040900	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB 040900	LIQUIDATED DAMAGES PROCEDURE FOR BID LETTINGS
JOB 040900	MANDATORY ELECTRONIC CONTRACT
JOB 040900	MANDATORY ELECTRONIC DOCUMENT SUBMITTAL
JOB 040900	PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
JOB 040900	RESTRAINING CONDITIONS
JOB 040900	SPECIAL CLEARING
JOB 040900	STORM WATER POLLUTION PREVENTION PLAN
JOB 040900	UTILITY ADJUSTMENTS

**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.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING U. S. MAILBOXES WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY RECEIVE CONTINUED MAIL SERVICE. PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS BID ITEMS.
- ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.
- ALL TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO ENSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A FENCE TO CONTROL LIVESTOCK IN AREAS WHERE PASTURES ARE SEVERED. WIRE FENCE MAY BE CONSTRUCTED INITIALLY, OR IN LIEU THEREOF, THE CONTRACTOR AT HIS OWN EXPENSE, MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
- THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
				JOB NO.	040900		4	13

TEMPORARY EROSION CONTROL DETAILS



STA. 100+00  
BEGIN JOB 040900  
L.M. 6.07

**I-49 MAIN LANES**

<b>SAND BAG DITCH CHECK (E-5) EACH</b>		
STA. 92+02 TO 96+14	LT. =	2
STA. 98+00	RT. =	1
STA. 101+85	LT. =	1
STA. 106+49	RT. =	1
STA. 110+44	LT. =	1
STA. 115+58	RT. =	1
<b>ROCK DITCH CHECK (E-6) EACH</b>		
STA. 92+45 TO 96+54	LT. =	2
STA. 103+90	RT. =	1
STA. 108+99	RT. =	1
STA. 110+75	LT. =	1
STA. 116+11	RT. =	1
<b>SILT FENCE (E-11) LIN. FT.</b>		
STA. 88+97 TO 89+05	LT.	12
STA. 89+08 TO 104+23	LT.	1582
STA. 97+50 TO 97+99	RT.	57
STA. 98+03 TO 104+31	RT.	883
STA. 100+69 TO 101+85	LT.	592
STA. 100+74 TO 101+59	LT.	186
STA. 104+30 TO 105+23	LT.	101
STA. 106+91 TO 107+31	RT.	43
STA. 106+57 TO 112+34	LT.	612
STA. 112+73 TO 114+62	LT.	182
STA. 113+74 TO 115+78	RT.	220
STA. 116+17 TO 116+47	RT.	31
<b>DROP INLET FILTER SOCK (E-13) LIN. FT.</b>		
STA. 91+81	LT. =	27
STA. 93+42	LT. =	27

- NOTES:**
- REFER TO SURVEY CONTROL DETAILS SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.
  - EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.
  - CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE OF EXISTING ROADSIDE DITCHES.

**REVISIONS**

DATE	REVISION

**LEGEND**

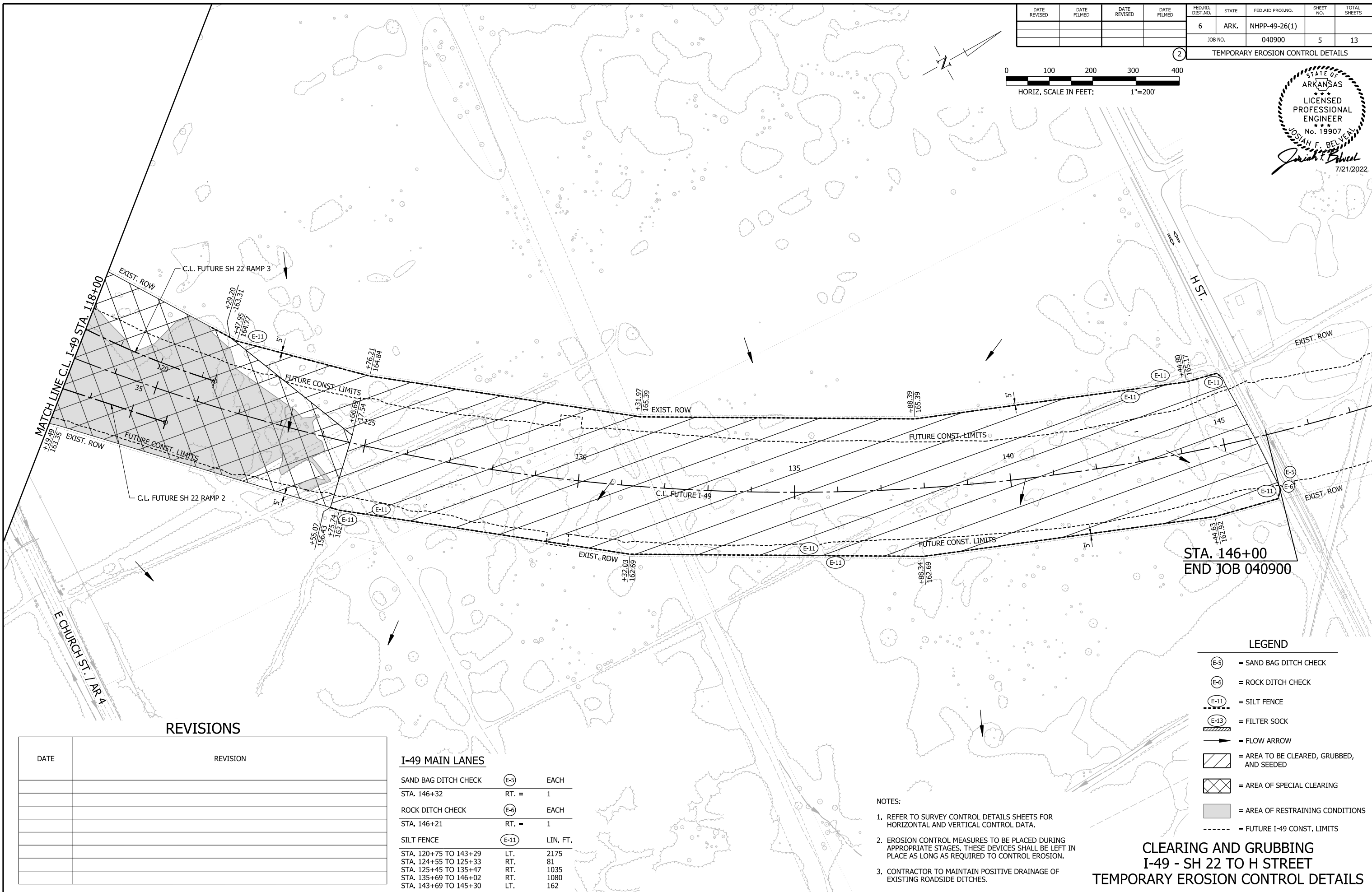
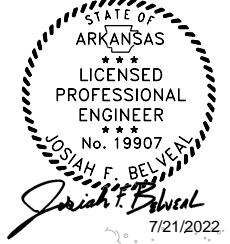
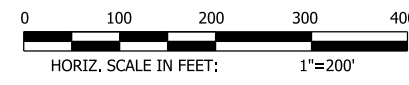
- (E-5) = SAND BAG DITCH CHECK
- (E-6) = ROCK DITCH CHECK
- (E-11) = SILT FENCE
- (E-13) = FILTER SOCK
- = FLOW ARROW
- [Diagonal Lines] = AREA TO BE CLEARED, GRUBBED, AND SEEDING
- [Cross-hatch] = AREA OF SPECIAL CLEARING
- [Grey Shaded] = AREA OF RESTRAINING CONDITIONS
- - - = FUTURE I-49 CONST. LIMITS

**CLEARING AND GRUBBING  
I-49 - SH 22 TO H STREET  
TEMPORARY EROSION CONTROL DETAILS**

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
JOB NO. 040900							5	13

TEMPORARY EROSION CONTROL DETAILS



**REVISIONS**

DATE	REVISION

**I-49 MAIN LANES**

SAND BAG DITCH CHECK	(E-5)	EACH
STA. 146+32	RT. =	1
ROCK DITCH CHECK	(E-6)	EACH
STA. 146+21	RT. =	1
SILT FENCE	(E-11)	LIN. FT.
STA. 120+75 TO 143+29	LT.	2175
STA. 124+55 TO 125+33	RT.	81
STA. 125+45 TO 135+47	RT.	1035
STA. 135+69 TO 146+02	RT.	1080
STA. 143+69 TO 145+30	LT.	162

- NOTES:**
- REFER TO SURVEY CONTROL DETAILS SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.
  - EROSION CONTROL MEASURES TO BE PLACED DURING APPROPRIATE STAGES. THESE DEVICES SHALL BE LEFT IN PLACE AS LONG AS REQUIRED TO CONTROL EROSION.
  - CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE OF EXISTING ROADSIDE DITCHES.

**LEGEND**

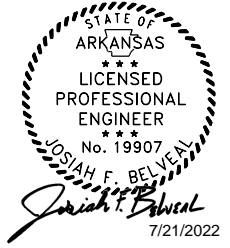
(E-5)	= SAND BAG DITCH CHECK
(E-6)	= ROCK DITCH CHECK
(E-11)	= SILT FENCE
(E-13)	= FILTER SOCK
	= FLOW ARROW
	= AREA TO BE CLEARED, GRUBBED, AND SEEDED
	= AREA OF SPECIAL CLEARING
	= AREA OF RESTRAINING CONDITIONS
---	= FUTURE I-49 CONST. LIMITS

**CLEARING AND GRUBBING  
I-49 - SH 22 TO H STREET  
TEMPORARY EROSION CONTROL DETAILS**

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DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
						JOB NO.	040900	6
						TOTAL SHEETS		

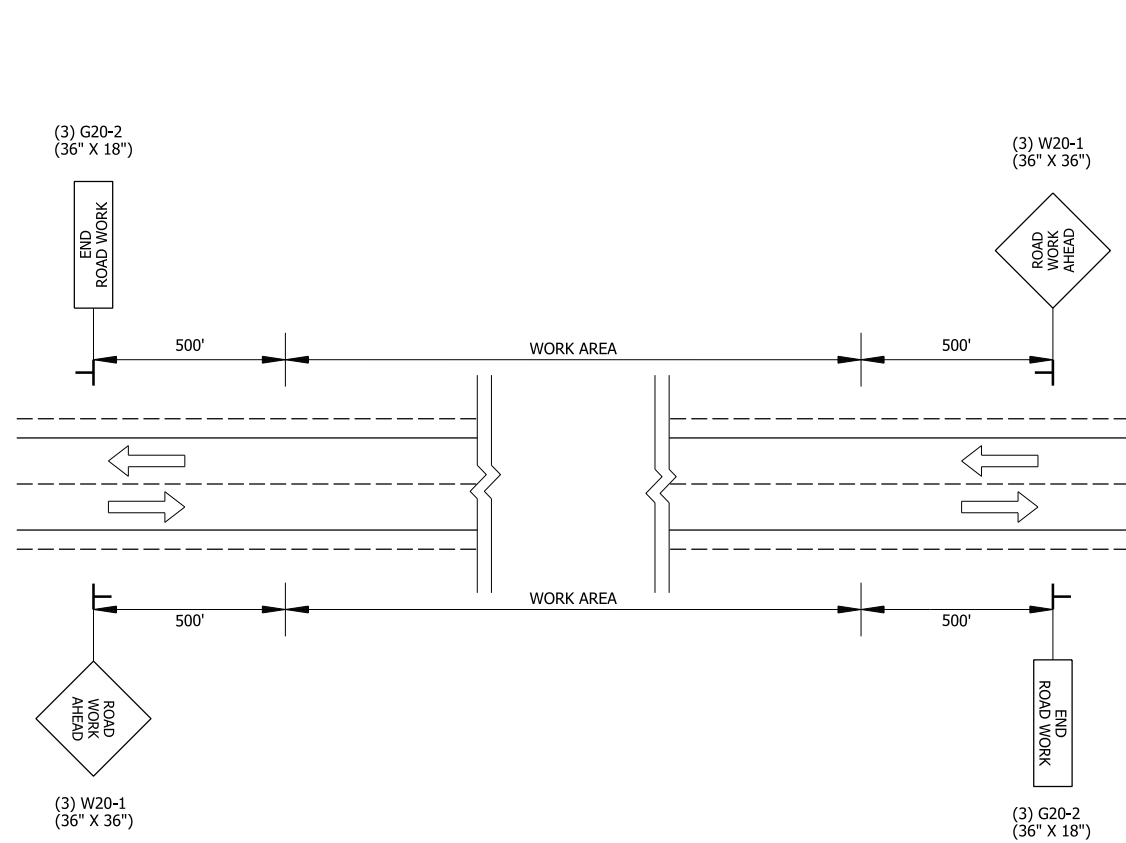
2 MAINTENANCE OF TRAFFIC DETAILS



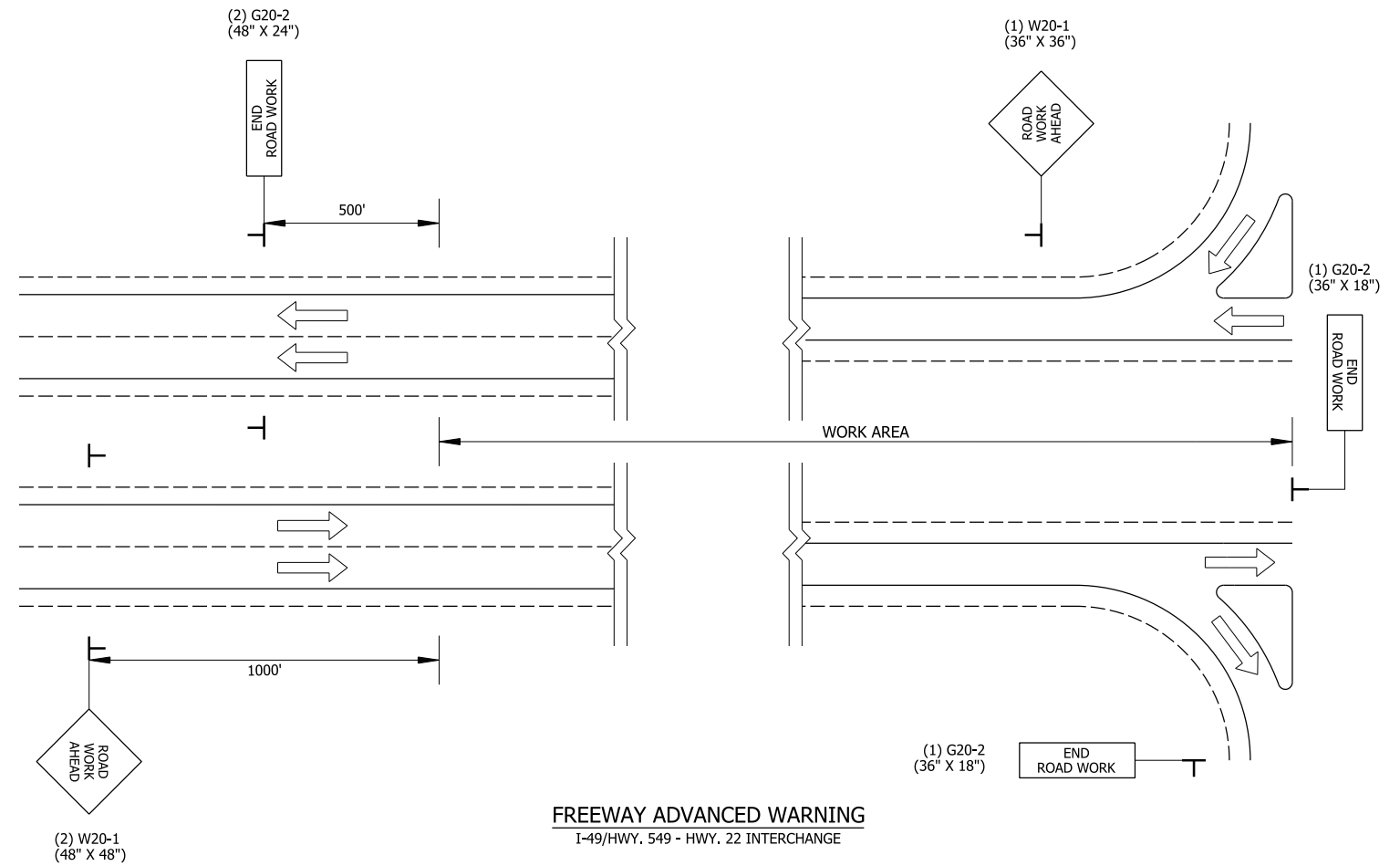
RIGHT SHOULDER CLOSED  
\*(1) W21-5a  
(36" X 36")

DO NOT PASS  
\*(2) R4-1  
(24" X 30")

\*IF AND WHERE DIRECTED BY THE ENGINEER



**HIGHWAY/CONVENTIONAL ROAD  
ADVANCED WARNING**  
PARK RD.  
E CHURCH ST./AR 4  
FORT ST./HWY. 22



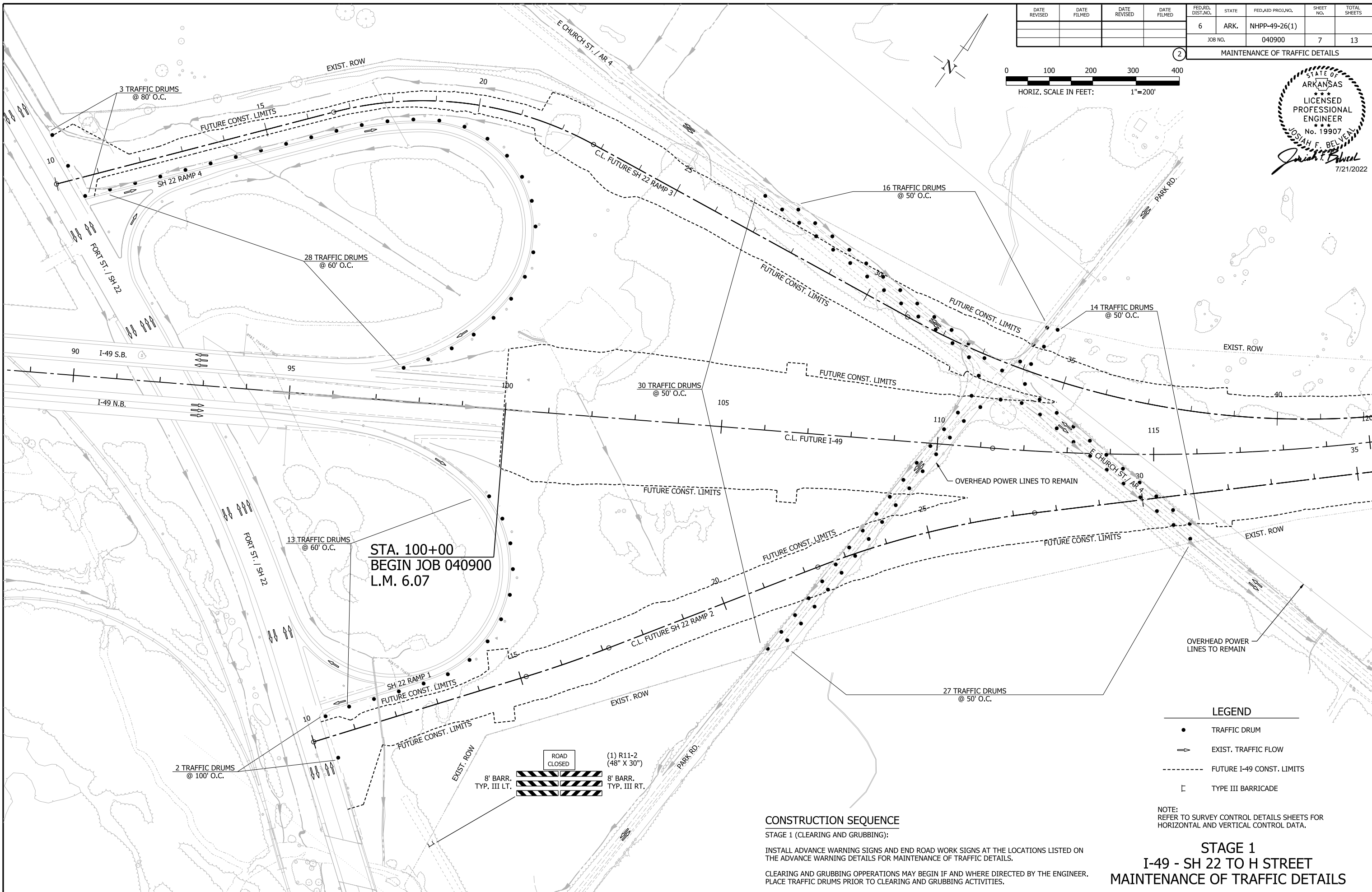
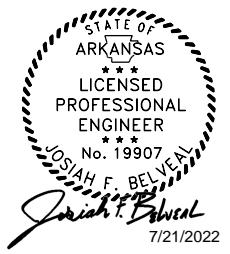
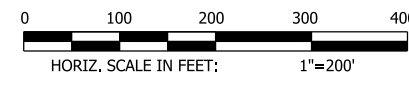
**FREEWAY ADVANCED WARNING**  
I-49/HWY. 549 - HWY. 22 INTERCHANGE

ADVANCE SIGNS AT BEGINNING AND END OF JOB

ADVANCE WARNING DETAILS  
MAINTENANCE OF TRAFFIC DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
JOB NO. 040900							7	13

MAINTENANCE OF TRAFFIC DETAILS



STA. 100+00  
BEGIN JOB 040900  
L.M. 6.07



- LEGEND**
- TRAFFIC DRUM
  - EXIST. TRAFFIC FLOW
  - - - - FUTURE I-49 CONST. LIMITS
  - TYPE III BARRICADE

**CONSTRUCTION SEQUENCE**

STAGE 1 (CLEARING AND GRUBBING):  
INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AT THE LOCATIONS LISTED ON THE ADVANCE WARNING DETAILS FOR MAINTENANCE OF TRAFFIC DETAILS.  
CLEARING AND GRUBBING OPERATIONS MAY BEGIN IF AND WHERE DIRECTED BY THE ENGINEER. PLACE TRAFFIC DRUMS PRIOR TO CLEARING AND GRUBBING ACTIVITIES.

NOTE:  
REFER TO SURVEY CONTROL DETAILS SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

**STAGE 1  
I-49 - SH 22 TO H STREET  
MAINTENANCE OF TRAFFIC DETAILS**

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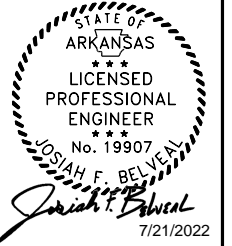
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
				JOB NO.	040900	8	13	

2 QUANTITIES

**ADVANCE WARNING SIGNS AND DEVICES**

SIGN NUMBER	DESCRIPTION	SIGN SIZE	STAGE 1 LIN. FT. - EACH	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS EACH	BARRICADES (TYPE III)	
					NO.	SQ. FT.		RIGHT	LEFT
								LIN. FT.	
W20-1	ROAD WORK AHEAD	48"x48"	2	2	2	32.0			
W20-1	ROAD WORK AHEAD	36"x36"	7	7	7	63.0			
G20-2	END ROAD WORK	48"x24"	2	2	2	16.0			
G20-2	END ROAD WORK	36"x18"	8	8	8	36.0			
R11-2	ROAD CLOSED	48"x30"	1	1	1	10.0			
R4-1	DO NOT PASS	24"x30"	2	2	2	10.0			
W21-5a	RIGHT SHOULDER CLOSED	36"x36"	1	1	1	9.0			
	TRAFFIC DRUMS		133	133			133		
	TYPE III BARRICADE-RT. (8')		1	1				8	
	TYPE III BARRICADE-LT. (8')		1	1					8
<b>TOTALS:</b>						<b>176.0</b>	<b>133</b>	<b>8</b>	<b>8</b>

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.



**EROSION CONTROL**

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL											
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	TEMPORARY SEEDING	MULCH COVER	WATER	WATTLE (20") DITCH CHECKS (E-1)	SAND BAG DITCH CHECKS (E-5)	ROCK DITCH CHECKS (E-6)	SILT FENCE (E-11)	DROP INLET FILTER SOCK (12") (E-13)	SEDIMENT BASIN (E-14)	OBLITERATION OF SEDIMENT BASIN	*SEDIMENT REMOVAL & DISPOSAL	
			ACRE	TON	ACRE	M.GAL.	ACRE	ACRE	ACRE	M.GAL.	ACRE	ACRE	M.GAL.	LIN. FT.	BAG	CU.YD.	LIN. FT.	LIN. FT.	CU.YD.
ENTIRE	PROJECT	CLEARING AND GRUBBING	36.82	74	36.82	3755.6	36.82	73.64	73.64	1502.3		176	21	9034	54				350
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			2.00	4	2.00	204.0	2.00	4.00	4.00	81.6	72	44	6	450	108	6600	6600	6629	
<b>TOTALS:</b>			<b>38.82</b>	<b>78</b>	<b>38.82</b>	<b>3959.6</b>	<b>38.82</b>	<b>77.64</b>	<b>77.64</b>	<b>1583.9</b>	<b>72</b>	<b>220</b>	<b>27</b>	<b>9484</b>	<b>162</b>	<b>6600</b>	<b>6600</b>	<b>6979</b>	

BASIS OF ESTIMATE:

- LIME .....2 TONS / ACRE OF SEEDING
- WATER.....102.0 M.G. / ACRE OF SEEDING
- WATER.....20.4 M.G. / ACRE OF TEMPORARY SEEDING
- TEMPORARY SEEDING.....2 \* ACRE OF SEEDING
- WATTLE DITCH CHECKS.....9 LIN. FT. / LOCATION
- SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
- ROCK DITCH CHECKS.....3 CU.YD./LOCATION
- FILTER SOCKS.....27 LIN. FT. / 5' DIA. INLET

NOTE: THE TEMPORARY EROSION CONTROL DEVICES SHOWN ABOVE AND ON THE PLANS SHALL BE INSTALLED IN SUCH A SEQUENCE AS TO DETER EROSION AND SEDIMENTATION ON U.S. WATERWAYS AS EXPLAINED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT.

\*QUANTITIES ESTIMATED.  
SEE SECTION 104.03 OF THE STD. SPECS.

**CLEARING AND GRUBBING**

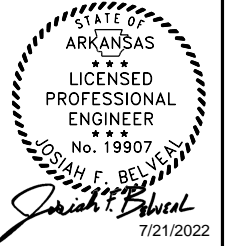
STATION	STATION	LOCATION	CLEARING	GRUBBING	SPECIAL CLEARING
			ACRE		
100+00	146+00	C.L. I-49 MAIN LANES	36.82	36.82	15.24
<b>TOTALS:</b>			<b>36.82</b>	<b>36.82</b>	<b>15.24</b>

NOTE: SEE TEMPORARY EROSION CONTROL DETAILS FOR LOCATIONS OF CLEARING AND GRUBBING



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
				JOB NO.		040900	9	13

2 SUMMARY OF QUANTITIES AND REVISIONS



**SUMMARY OF QUANTITIES**

ITEM NUMBER	ITEM	QUANTITY	UNIT
SP & 201	CLEARING	36.82	ACRE
SP & 201	GRUBBING	36.82	ACRE
SP & 201	SPECIAL CLEARING	15.24	ACRE
601	MOBILIZATION	1.00	LUMP SUM
SS & 603	MAINTENANCE OF TRAFFIC	1.00	LUMP SUM
SS & 604	SIGNS	176	SQ. FT.
SS & 604	BARRICADES	16	LIN. FT.
SS & 604	TRAFFIC DRUMS	133	EACH
620	LIME	78	TON
620	SEEDING	38.82	ACRE
SS & 620	MULCH COVER	116.46	ACRE
620	WATER	5543.5	M. GAL.
621	TEMPORARY SEEDING	77.64	ACRE
621	SILT FENCE	9484	LIN. FT.
621	SAND BAG DITCH CHECKS	220	BAG
621	SEDIMENT BASIN	6600	CU. YD.
621	OBLITERATION OF SEDIMENT BASIN	6600	CU. YD.
621	SEDIMENT REMOVAL AND DISPOSAL	6979	CU. YD.
621	ROCK DITCH CHECKS	27	CU. YD.
SS & 621	FILTER SOCK (12")	162	LIN. FT.
621	WATTLE (20")	72	LIN. FT.
623	SECOND SEEDING APPLICATION	38.82	ACRE
635	ROADWAY CONSTRUCTION CONTROL	1.00	LUMP SUM

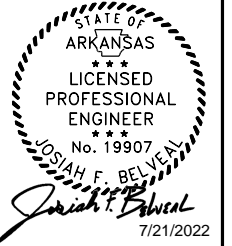
\* DENOTES ALTERNATE BID ITEMS.

**REVISIONS**

DATE	REVISION	SHEET NUMBER

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
						JOB NO. 040900	10	13

2 SURVEY CONTROL DETAILS



**SURVEY CONTROL COORDINATES**

Project Name: s040478  
Date: 2/16/2022  
Coordinate System: ARKANSAS STATE PLANE - NORTH/SOUTH ZONE BASED ON GPS CONTROL,  
PROJECTED TO GROUND.  
Units: U.S. SURVEY FOOT

POINT NAME	NORTHING	EASTING	ELEV	FEATURE	DESCRIPTION
1	367859.8196	628587.2244	436.26	CTL	STD ARDOT MON STAMPED PN:1 49 BARLING
2	368011.4934	629001.8596	433.72	CTL	STD ARDOT MON STAMPED PN:2 49 BARLING
3	368145.0423	629505.7474	407.11	CTL	STD ARDOT MON STAMPED PN:3 JOB 040748
4	368291.4838	629924.6345	408.28	CTL	STD ARDOT MON STAMPED PN:4 549
5	368924.0214	629192.1157	425.96	CTL	STD ARDOT MON STAMPED PN:5 549
6	368900.2908	629971.7237	415.56	CTL	STD ARDOT MON STAMPED PN:6 549
7	368809.4022	631079.0906	404.88	CTL	STD ARDOT MON STAMPED PN:7 549
8	369421.6219	631142.0250	410.69	CTL	STD ARDOT MON STAMPED PN:8 549
9	370185.4079	631194.6547	417.87	CTL	STD ARDOT MON STAMPED PN:9 JOB 040748
10	370136.1855	631836.3495	411.39	CTL	STD ARDOT MON STAMPED PN:10 549
11	370563.0475	631848.9745	415.17	CTL	STD ARDOT MON STAMPED PN:11 549
12	371061.2051	631857.2940	421.83	CTL	STD ARDOT MON STAMPED PN:12 549
13	371420.6121	631894.2753	419.42	CTL	STD ARDOT MON STAMPED PN:13 549
14	371415.7328	632448.4563	409.06	CTL	STD ARDOT MON STAMPED PN:14 549
15	371881.4664	631954.6450	409.16	CTL	STD ARDOT MON STAMPED PN:15 549
16	372554.9407	631962.8147	397.31	CTL	STD ARDOT MON STAMPED PN:16 549
17	372958.2470	631971.6722	398.41	CTL	STD ARDOT MON STAMPED PN:17 549
18	373415.2135	631993.0237	392.96	CTL	STD ARDOT MON STAMPED PN:18 549
19	373957.2855	632016.5023	389.07	CTL	STD ARDOT MON STAMPED PN:19 549
20	373944.3087	632605.0507	389.58	CTL	STD ARDOT MON STAMPED PN:20 549
21	374284.6004	632054.1022	388.67	CTL	STD ARDOT MON STAMPED PN:21 549
101	368816.2986	631833.8915	402.18	GPS	ARDOT GPS MON.650006A
900	367844.9777	628635.1553	441.81	TBM	AHTD DISK 549 BARLING
901	368889.3688	629871.6732	417.45	TBM	SQUARE CUT IN SE EDG S HW 549 BARLING
902	370117.2781	631836.9638	411.13	TBM	STD ARDOT MON STAMPED PN:902 549
903	371485.6781	631927.2643	418.06	TBM	SQUARE CUT N CB 18.5' N OF CL 549
904	372870.4271	631975.9643	399.08	TBM	STD ARDOT MON STAMPED PN:904 549
905	374275.4793	632033.3388	389.56	TBM	X CUT IN BOLT ON GV GAS WELL 549

**HORIZONTAL ALIGNMENT DATA**

ALIGNMENT NAME: I49

POINT	STATION	TYPE	NORTHING	EASTING
8000	46+00.28	POB	365367.3481	624472.4764
8001	111+27.98	PC	368745.3462	630058.1769
8002	136+82.71	PI	370067.3802	632244.2309
8003	157+89.31	PT	372621.9763	632269.6298
8004	261+47.40	POE	382979.5506	632372.6092

ALIGNMENT NAME: SH 22 RAMP 2

POINT	STATION	TYPE	NORTHING	EASTING
8100	10+00.00	POB	367280.3293	629181.4269
8101	15+13.06	PC	367689.0291	629491.5836
8102	16+14.08	PI	367769.4958	629552.6486
8103	17+15.01	PT	367854.0636	629607.8945
8104	22+32.26	PC	368287.1062	629890.7892
8105	24+92.03	PI	368504.5789	630032.8581
8106	27+49.13	PT	368680.5105	630223.9759
8107	35+82.30	POE	369244.7959	630836.9702

ALIGNMENT NAME: SH 22 RAMP 3

POINT	STATION	TYPE	NORTHING	EASTING
8110	10+00.00	POB	367979.8403	627947.7290
8111	16+60.91	PC	368488.0412	628370.2661
8112	19+86.07	PI	368738.0661	628578.1461
8113	22+79.93	PT	368777.2836	628900.9286
8114	31+07.41	PC	368877.0867	629722.3636
8115	37+40.86	PI	368953.4890	630351.1973
8116	43+30.71	PT	369390.5459	630809.7279

\*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped  
\*(standard markings common to all caps), or as Indicated  
(other markings indicated in the point description of the individual point).  
ALL DISTANCES ARE GROUND.  
USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.  
A PROJECT CAF OF 0.999938638 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.  
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.  
GRID DISTANCE = GROUND DISTANCE X CAF.  
GRID COORDINATES ARE STORED UNDER FILE NAME.s040748.CTL  
HORIZONTAL DATUM: NAD 83 (2011)  
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE  
AT A SPECIFIC POINT.

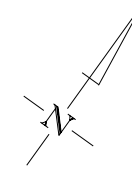
REFERENCE POINTS (1500 SERIES) ARE TO BE USED TO ESTABLISH CONTROL  
IF THE PRIMARY CONTROL POINTS LISTED ABOVE HAVE BEEN DESTROYED.  
REFERENCE POINTS ARE NOT TO BE USED FOR VERTICAL CONTROL

BASIS OF BEARING:  
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE  
DETERMINED FROM GPS CONTROL POINTS: 170031 - 170031A  
CONVERGENCE ANGLE: 01-17-37 LEFT AT LT:35-25-09.76 LG:094-13-22.4  
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)	11	13
				JOB NO.		040900	11	13

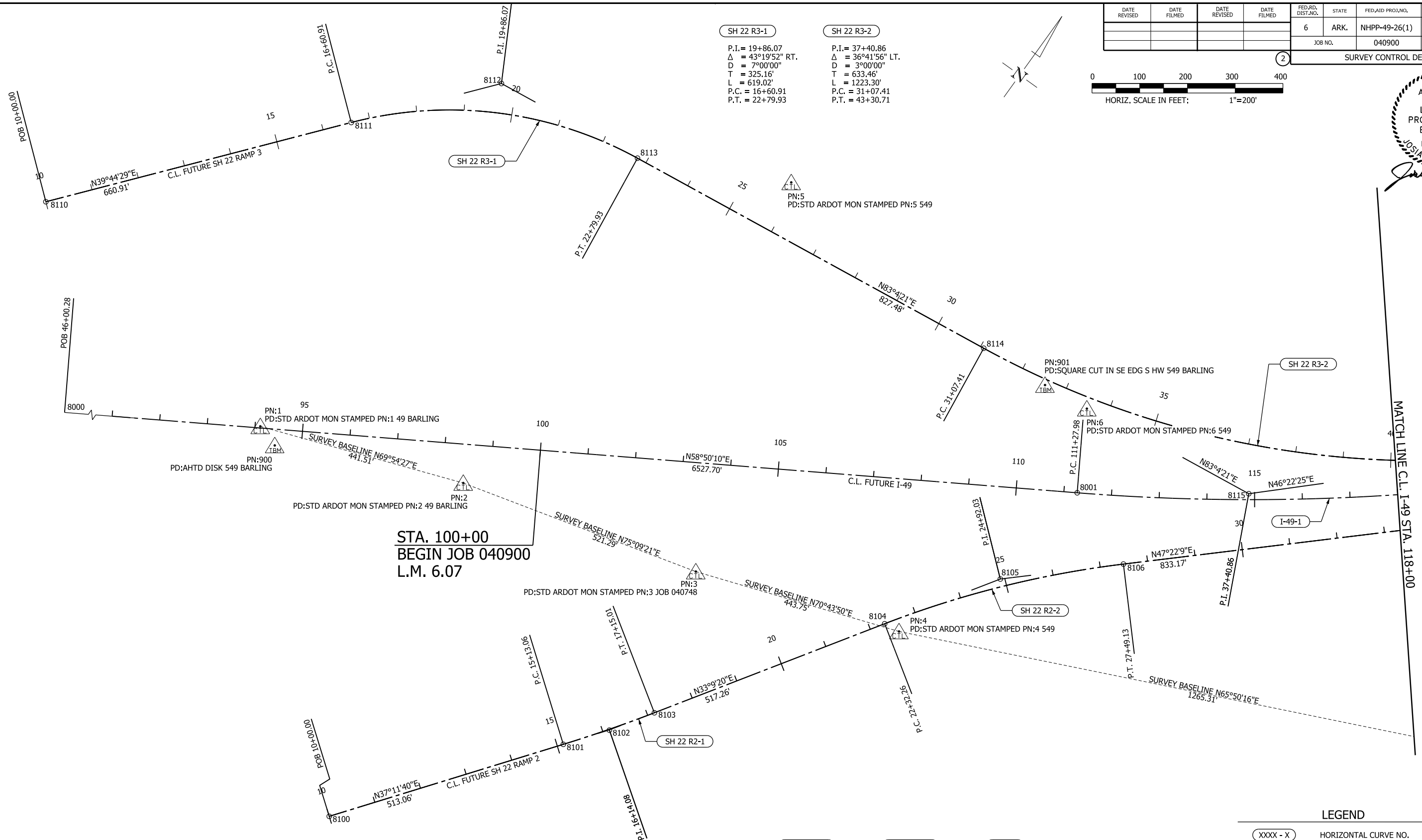
SURVEY CONTROL DETAILS

STATE OF ARKANSAS  
 LICENSED PROFESSIONAL ENGINEER  
 No. 19907  
 JOSIAH F. BELVEAL  
 7/21/2022



SH 22 R3-1  
 P.I. = 19+86.07  
 $\Delta = 43^\circ 19' 52''$  RT.  
 D = 7°00'00"  
 T = 325.16'  
 L = 619.02'  
 P.C. = 16+60.91  
 P.T. = 22+79.93

SH 22 R3-2  
 P.I. = 37+40.86  
 $\Delta = 36^\circ 41' 56''$  LT.  
 D = 3°00'00"  
 T = 633.46'  
 L = 1223.30'  
 P.C. = 31+07.41  
 P.T. = 43+30.71



STA. 100+00  
 BEGIN JOB 040900  
 L.M. 6.07

SH 22 R2-1  
 P.I. = 16+14.08  
 $\Delta = 4^\circ 02' 19''$  LT.  
 D = 2°00'00"  
 T = 101.01'  
 L = 201.94'  
 P.C. = 15+13.06  
 P.T. = 17+15.01

SH 22 R2-2  
 P.I. = 24+92.03  
 $\Delta = 14^\circ 12' 49''$  RT.  
 D = 2°45'00"  
 T = 259.77'  
 L = 516.86'  
 P.C. = 22+32.26  
 P.T. = 27+49.13

I-49-1  
 P.I. = 136+82.71  
 $\Delta = 58^\circ 15' 59''$  LT.  
 D = 1°15'00"  
 T = 2554.72'  
 L = 4661.33'  
 P.C. = 111+27.98  
 P.T. = 157+89.31

LEGEND

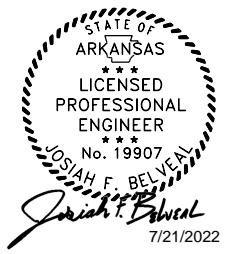
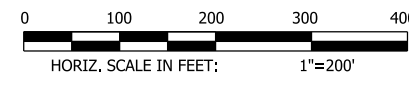
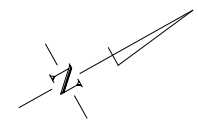
XXXX - X	HORIZONTAL CURVE NO.
	SURVEY CONTROL POINT

NOTE:  
 REFER TO FIRST SHEET OF SURVEY CONTROL DETAILS FOR POINT COORDINATES AND ADDITIONAL INFORMATION

I-49 - SH 22 TO H STREET  
 SURVEY CONTROL DETAILS

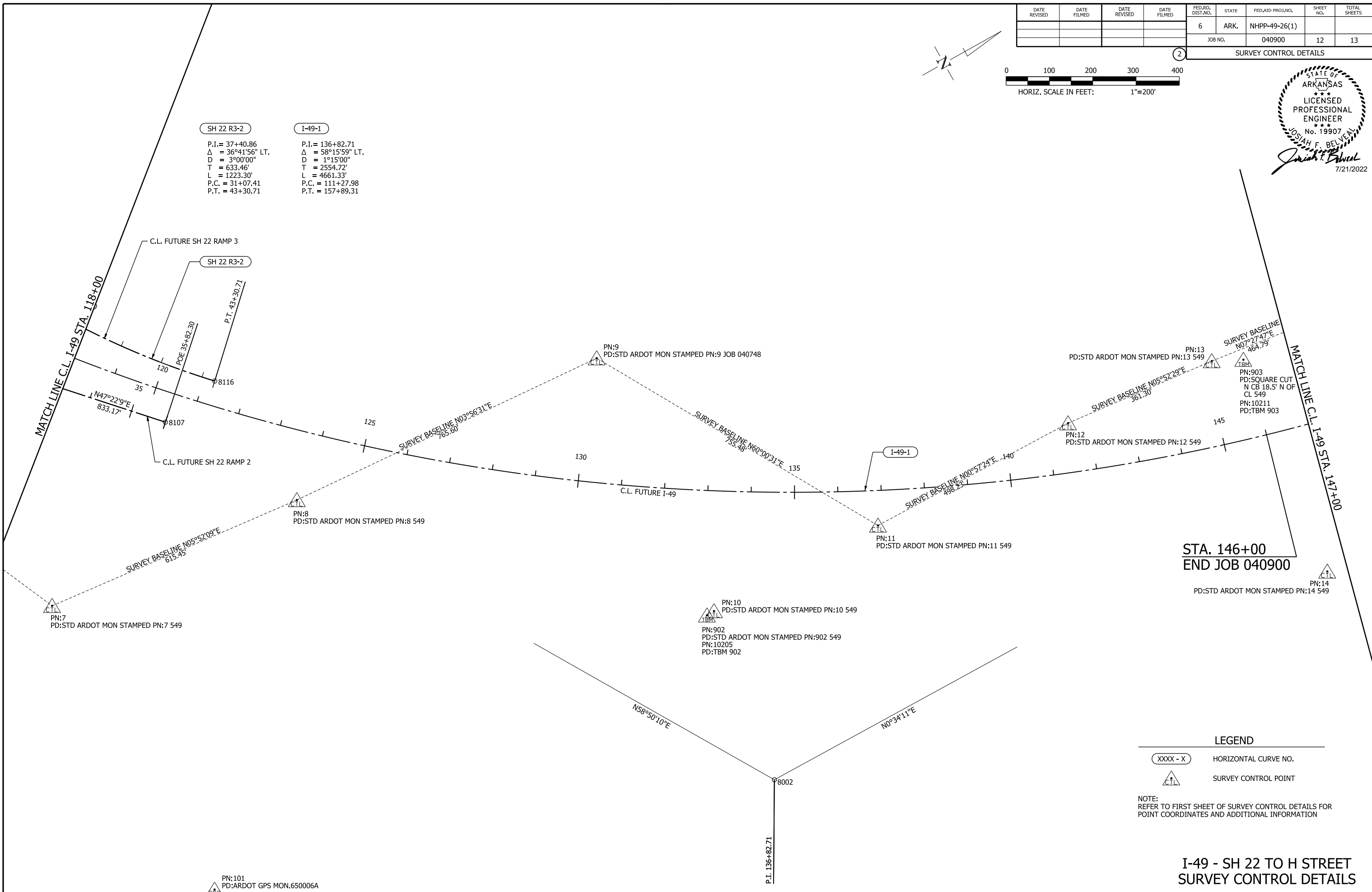
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)	12	13
				JOB NO.		040900	12	13

2 SURVEY CONTROL DETAILS



SH 22 R3-2  
P.I. = 37+40.86  
 $\Delta$  = 36°41'56" LT.  
D = 3°00'00"  
T = 633.46'  
L = 1223.30'  
P.C. = 31+07.41  
P.T. = 43+30.71

I-49-1  
P.I. = 136+82.71  
 $\Delta$  = 58°15'59" LT.  
D = 1°15'00"  
T = 2554.72'  
L = 4661.33'  
P.C. = 111+27.98  
P.T. = 157+89.31



STA. 146+00  
END JOB 040900

**LEGEND**

XXXX - X	HORIZONTAL CURVE NO.
	SURVEY CONTROL POINT

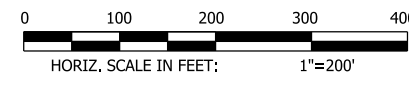
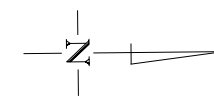
NOTE:  
REFER TO FIRST SHEET OF SURVEY CONTROL DETAILS FOR POINT COORDINATES AND ADDITIONAL INFORMATION

I-49 - SH 22 TO H STREET  
SURVEY CONTROL DETAILS

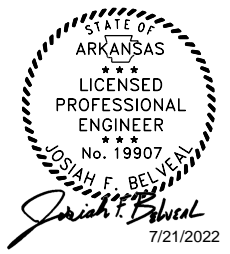
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PN:101  
PD:ARDOT GPS MON.650006A

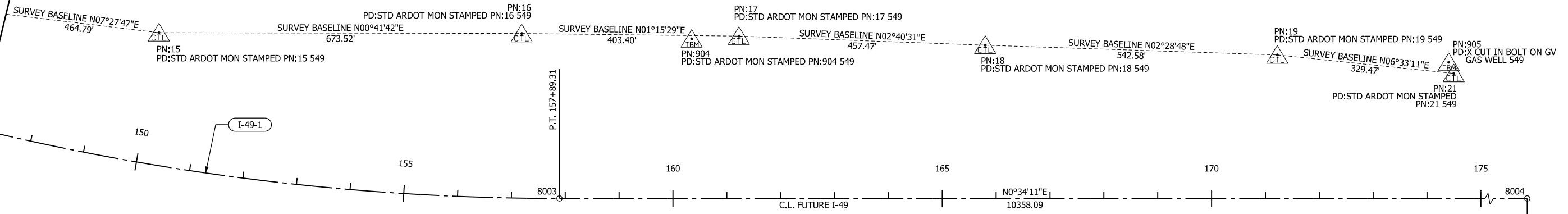
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	NHPP-49-26(1)		
				JOB NO.		040900	13	13



2 SURVEY CONTROL DETAILS



MATCH LINE C.L. I-49 STA. 147+00




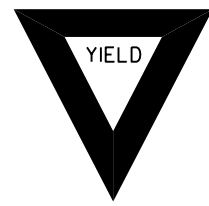
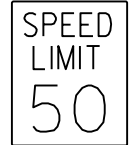






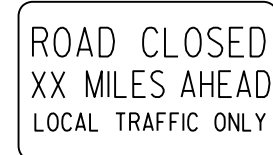
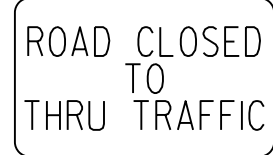

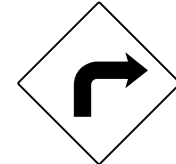
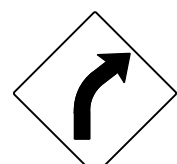
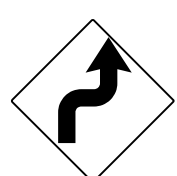
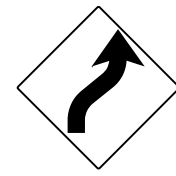
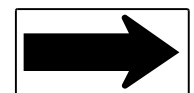
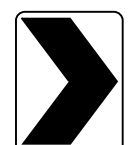
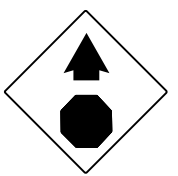
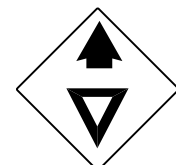
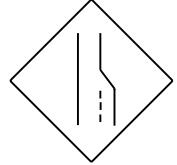

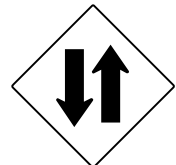

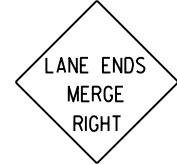









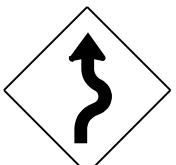



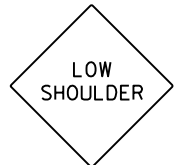

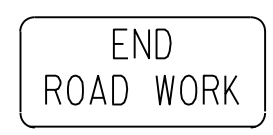
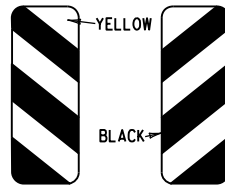
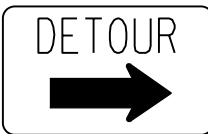

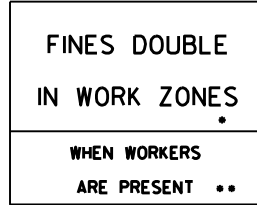
I-49-1  
P.I. = 136+82.71  
Δ = 58°15'59" LT.  
D = 1°15'00"  
T = 2554.72'  
L = 4661.33'  
P.C. = 111+27.98  
P.T. = 157+89.31

PN:20  
PD:STD ARDOT MON STAMPED PN:20 549

- LEGEND**
- XXXX - X HORIZONTAL CURVE NO.
  - SURVEY CONTROL POINT

NOTE:  
REFER TO FIRST SHEET OF SURVEY CONTROL DETAILS FOR POINT COORDINATES AND ADDITIONAL INFORMATION

I-49 - SH 22 TO H STREET  
SURVEY CONTROL DETAILS

<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>W3-5</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>W3-5a</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</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>W21-5a</p>  <p>STD. 36"x36" FWY. 48"x48"</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>18" 500 FEET 24" W16-2</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>• USE 6" C LETTERS •• USE 4" D LETTERS</p>

ADVANCE DISTANCES (XXXX)

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

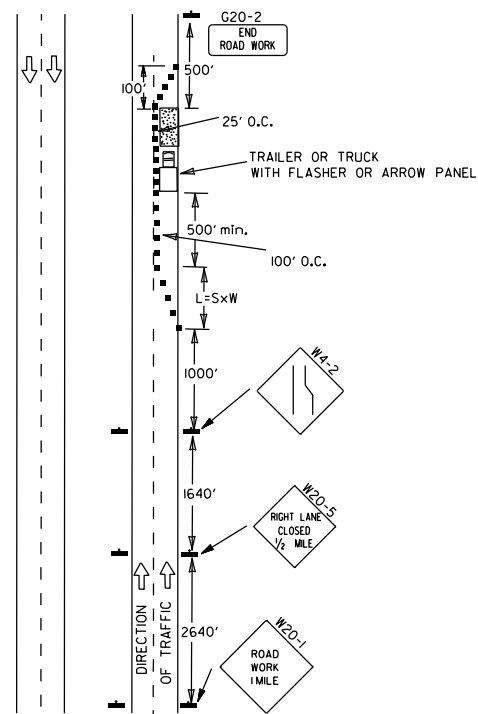
GENERAL NOTES:

- 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.

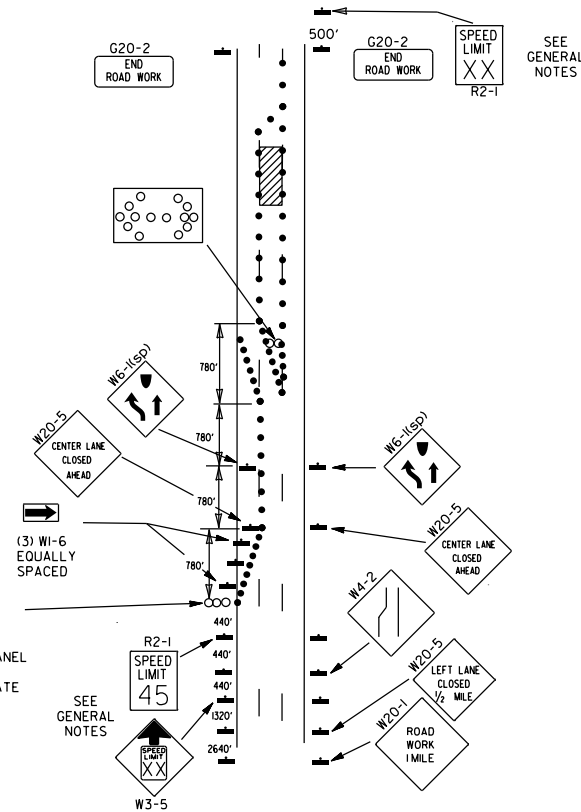
• NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED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

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
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	

ARKANSAS STATE HIGHWAY COMMISSION  
STANDARD TRAFFIC CONTROLS  
FOR HIGHWAY CONSTRUCTION  
STANDARD DRAWING TC-1



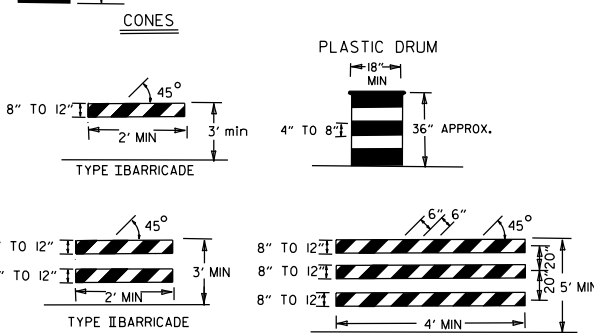
(A) TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

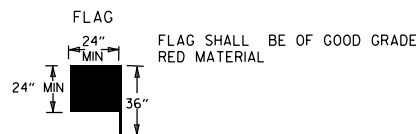
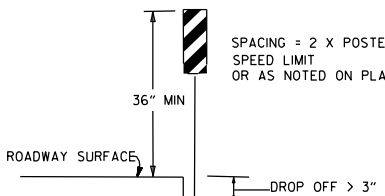
CHANNELIZING DEVICES

WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.



NOTE: FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

VERTICAL PANEL PLACEMENT

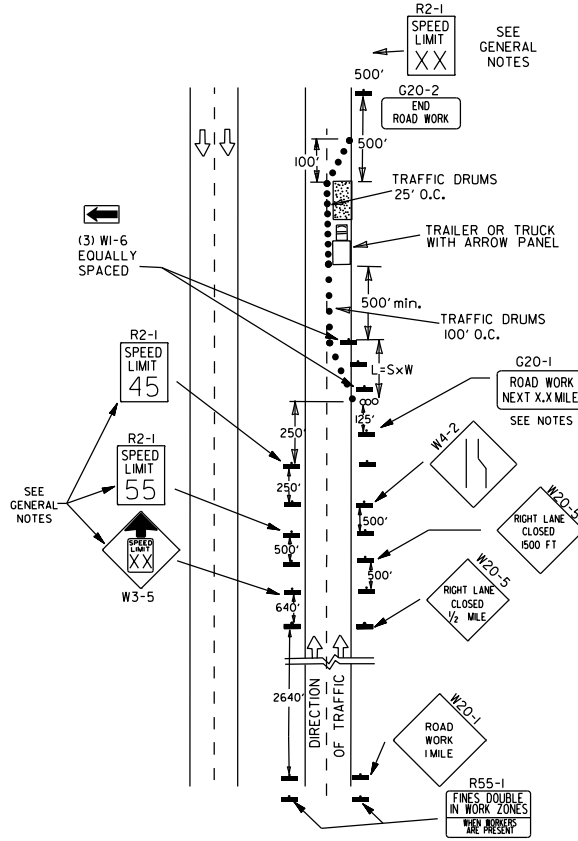


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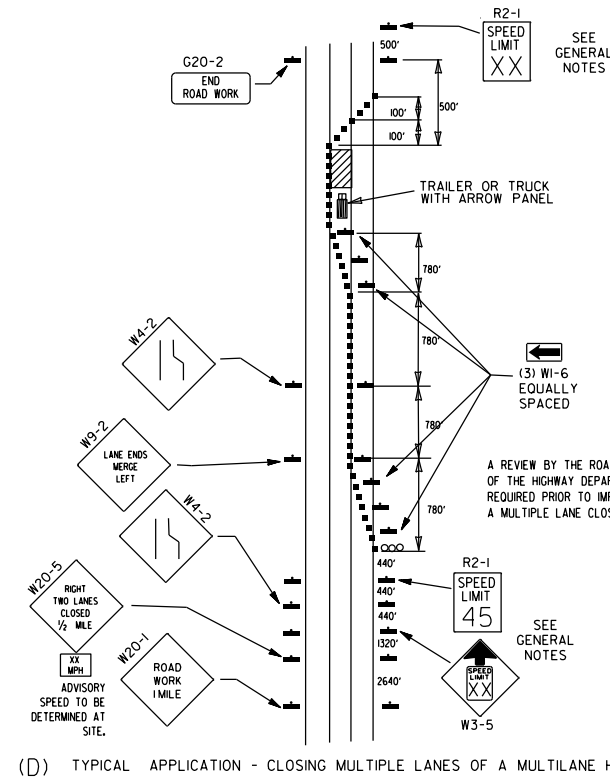
- ○ ○ ARROW PANEL (IF REQUIRED)
- CHANNELIZING DEVICE
- TRAFFIC DRUM

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-(45) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45MPH) SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(XX) 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-(45) SHALL BE OMITTED. ADDITIONAL R2-1(55MPH) SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-(XX) 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 SHOULD 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(1/2 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 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. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
11. ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

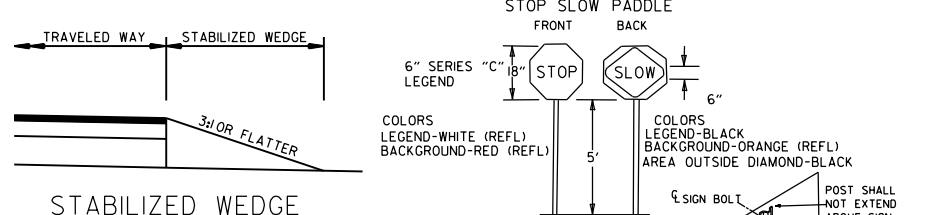
TRAFFIC CONTROL DEVICES

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1" ≤ 3"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
> 3"	CENTERLINE	STANDARD LANE CLOSURE <sup>(6)</sup>	STANDARD LANE CLOSURE <sup>(6)</sup>
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS <sup>(1)</sup>	W8-9 AND TRAFFIC DRUMS <sup>(1)</sup>
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 18"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING AND TRAFFIC DRUMS <sup>(3)</sup>
> 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER <sup>(4)</sup> & EDGE LINES	PRECAST CONCRETE BARRIER <sup>(4)</sup> & EDGE LINES

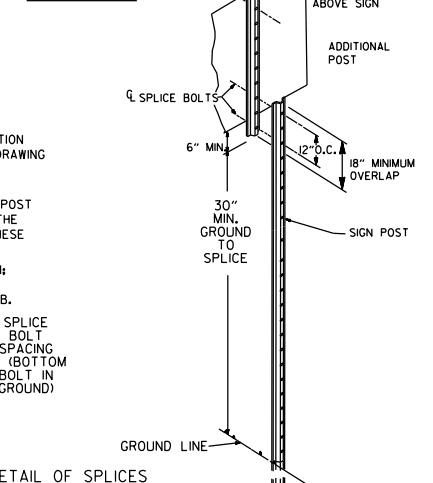
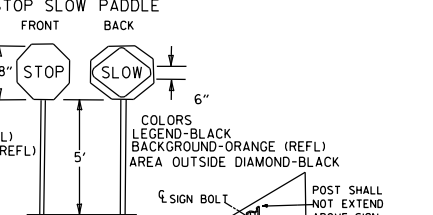
VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 3"	CENTERLINE	W8-11 AND LANE STRIPING	W8-11 AND LANE STRIPING
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES	PRECAST CONCRETE BARRIER & EDGE LINES

FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

- GENERAL NOTES:
1. WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
  2. WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED.
  3. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
  4. A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
  5. W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.
  6. TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).



NOTE: MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.

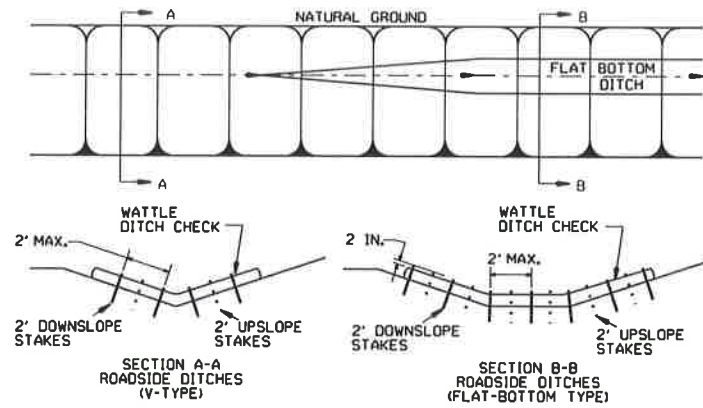


DATE	REVISION	FILED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES	
05-20-21	REVISED NOTE 10	
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS	
11-07-19	REVISED NOTE 9, ADDED NOTE II	
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS	
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5	
10-15-09	ADDED 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	



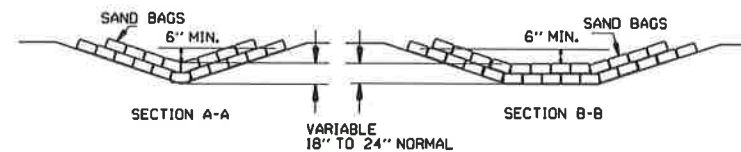
**GENERAL NOTES**

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

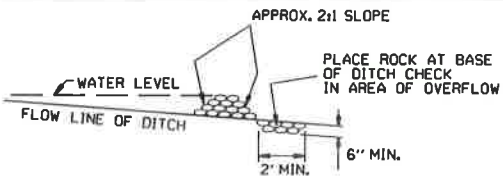


**WATTLE DITCH CHECK (E-1)**

NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.

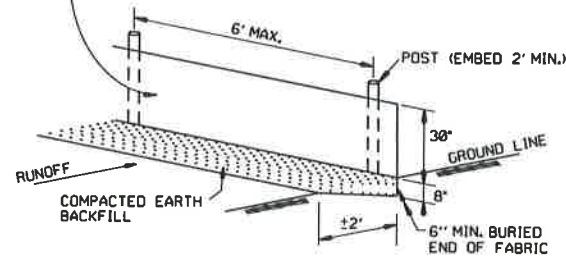


**SAND BAG DITCH CHECK (E-5)**

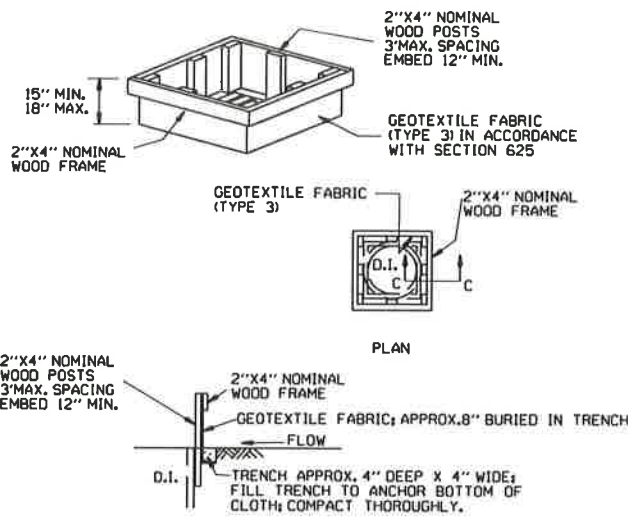


**ROCK DITCH CHECK (E-6)**

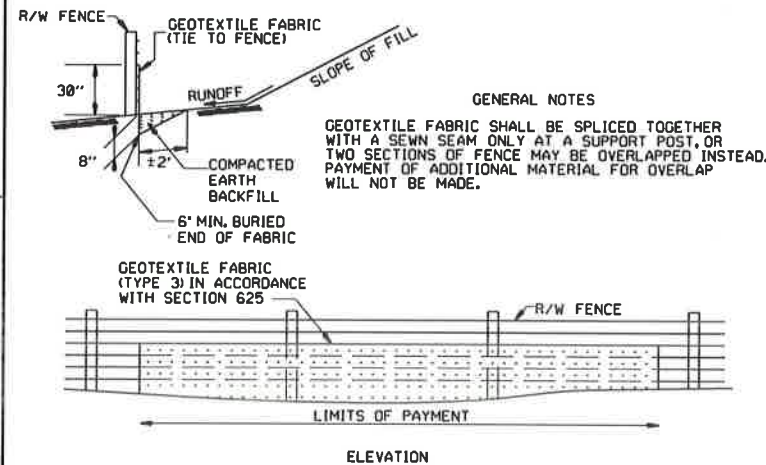
**GENERAL NOTES**  
 GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625  
 GEOTEXTILE FABRIC SHALL BE SPICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



**SILTS FENCE (E-11)**

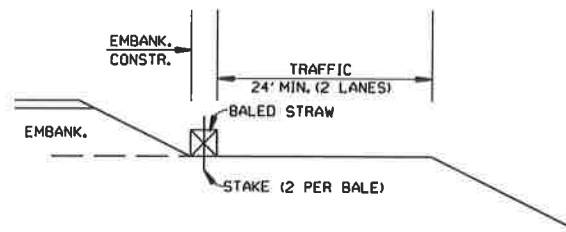


**DROP INLET SILTS FENCE (E-7)**

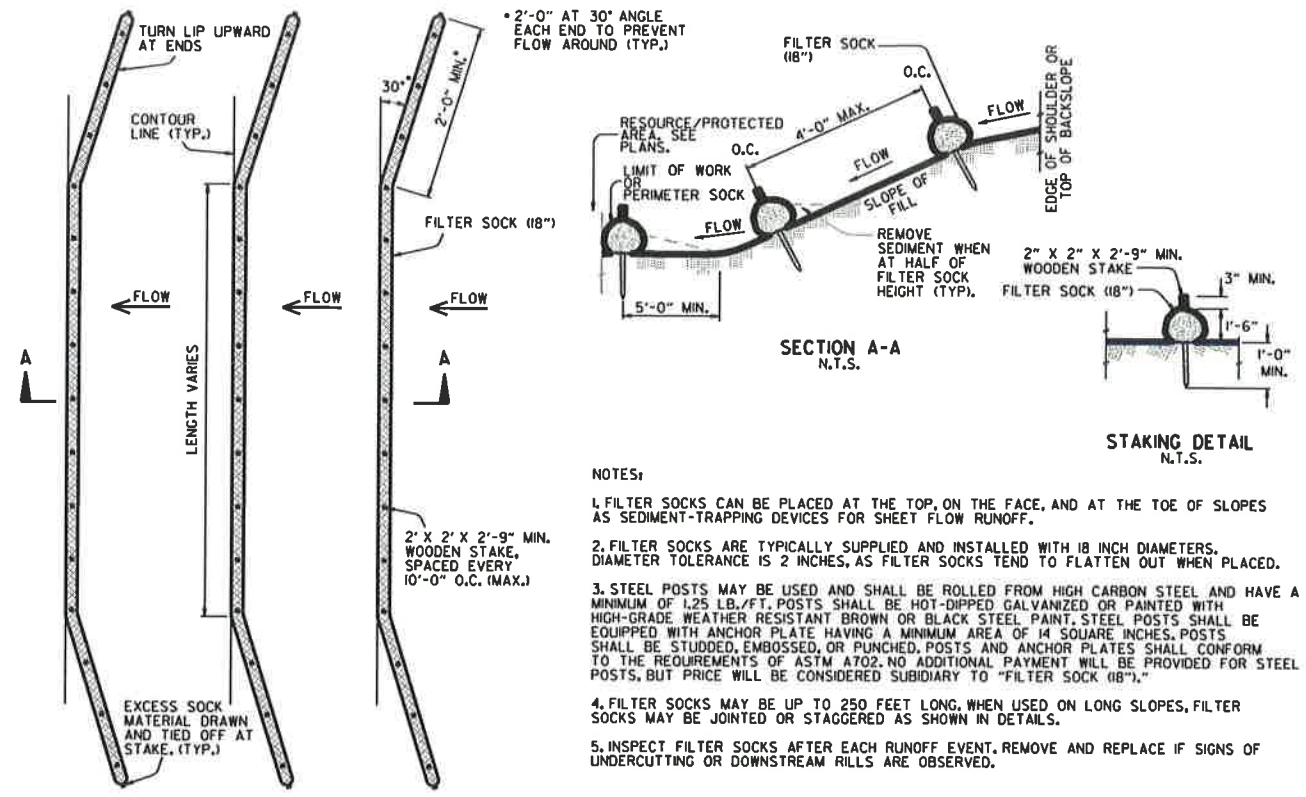


**SILTS FENCE ON R/W FENCE (E-4)**

**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.

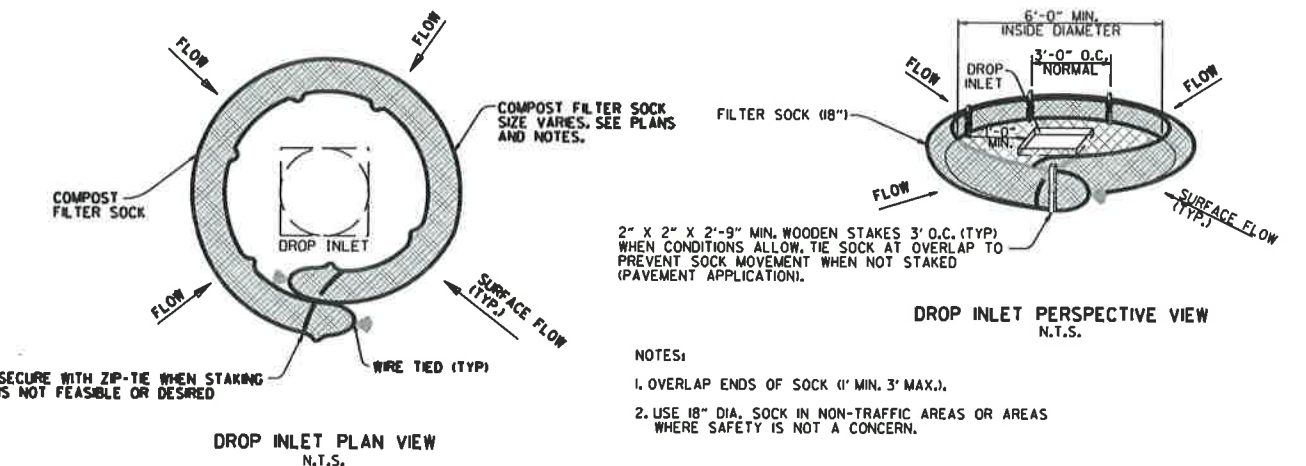


**BALED STRAW FILTER BARRIER (E-2)**



**FILTER SOCK ALONG SLOPE (E-3)**

**NOTES:**  
 1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.  
 2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.  
 3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18\"/>



**COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)**

**NOTES:**  
 1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).  
 2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
1-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	7-20-95
07-20-95	REVISED SILTS FENCE E-4 AND E-11	
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	6-2-94
06-02-94	REVISED E-1, 4, 7 & 11 DELETED E-2 & 3	
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION  
 TEMPORARY EROSION CONTROL DEVICES  
 STANDARD DRAWING TEC-1

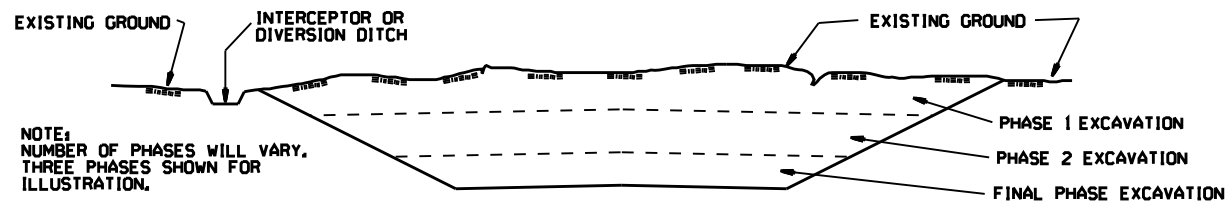


## CLEARING AND GRUBBING

### CONSTRUCTION SEQUENCE

1. PLACE PERIMETER CONTROLS (I.E. SILT FENCES, DIVERSION DITCHES, SEDIMENT BASINS, ETC.)
2. PERFORM CLEARING AND GRUBBING OPERATION.

## EXCAVATION



NOTE:  
NUMBER OF PHASES WILL VARY.  
THREE PHASES SHOWN FOR  
ILLUSTRATION.

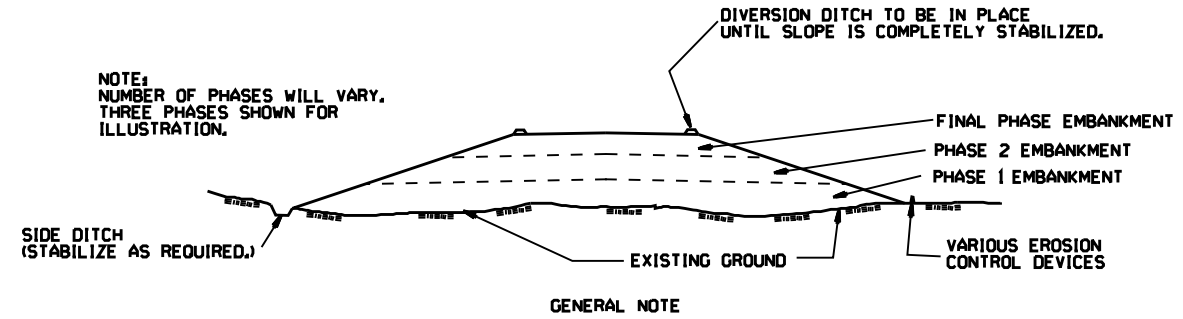
### GENERAL NOTE

ALL CUT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE EXCAVATED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

### CONSTRUCTION SEQUENCE

1. EXCAVATE AND STABILIZE INTERCEPTOR AND/OR DIVERSION DITCHES.
2. PERFORM PHASE 1 EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING.
3. PERFORM PHASE 2 EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING.
4. PERFORM FINAL PHASE OF EXCAVATION, PLACE PERMANENT OR TEMPORARY SEEDING, STABILIZE DITCHES, CONSTRUCT DITCH CHECKS, DIVERSION DITCHES, SEDIMENT BASINS, OR OTHER EROSION CONTROL DEVICES AS REQUIRED.

## EMBANKMENT



NOTE:  
NUMBER OF PHASES WILL VARY.  
THREE PHASES SHOWN FOR  
ILLUSTRATION.

### GENERAL NOTE

ALL EMBANKMENT SLOPES SHALL BE DRESSED, PREPARED, SEEDED, AND MULCHED AS THE WORK PROGRESSES. SLOPES SHALL BE CONSTRUCTED AND STABILIZED IN EQUAL INCREMENTS NOT TO EXCEED 25 FEET, MEASURED VERTICALLY.

### CONSTRUCTION SEQUENCE

1. CONSTRUCT DIVERSION DITCHES, DITCH CHECKS, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING, PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING, PROVIDE DIVERSION DITCHES AND SLOPE DRAINS IF EMBANKMENT CONSTRUCTION IS TO BE TEMPORARILY ABANDONED FOR A PERIOD OF GREATER THAN 21 DAYS.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING, PLACE DIVERSION DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

			ARKANSAS STATE HIGHWAY COMMISSION
			TEMPORARY EROSION CONTROL DEVICES
			STANDARD DRAWING TEC-3
11-03-94	CORRECTED SPELLING		
6-2-94	Drawn & Issued		6-2-94
DATE	REVISION		FILMED