"A FULLY CONTROLLED ACCESS FACILITY"

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

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.		BB0805	1	81
				(2)		HWY. 331 - ATKINS (S)		

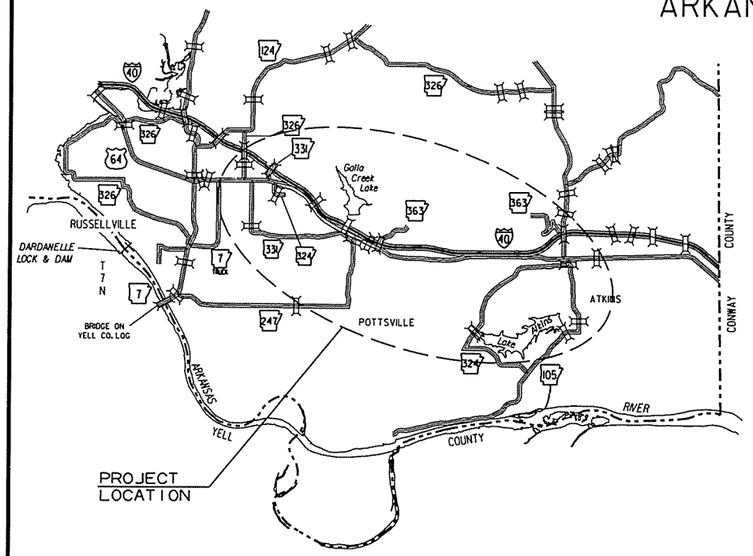
HWY. 331-ATKINS (S)

POPE COUNTY

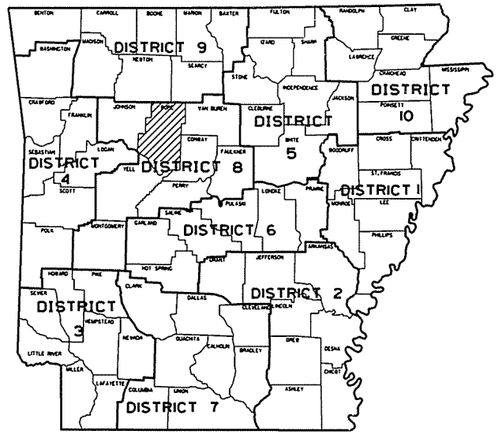
ROUTE 40 SECTION 22

FEDERAL AID PROJ. BIM-B40-0(224) & 9050

JOB BB0805



VICINITY MAP

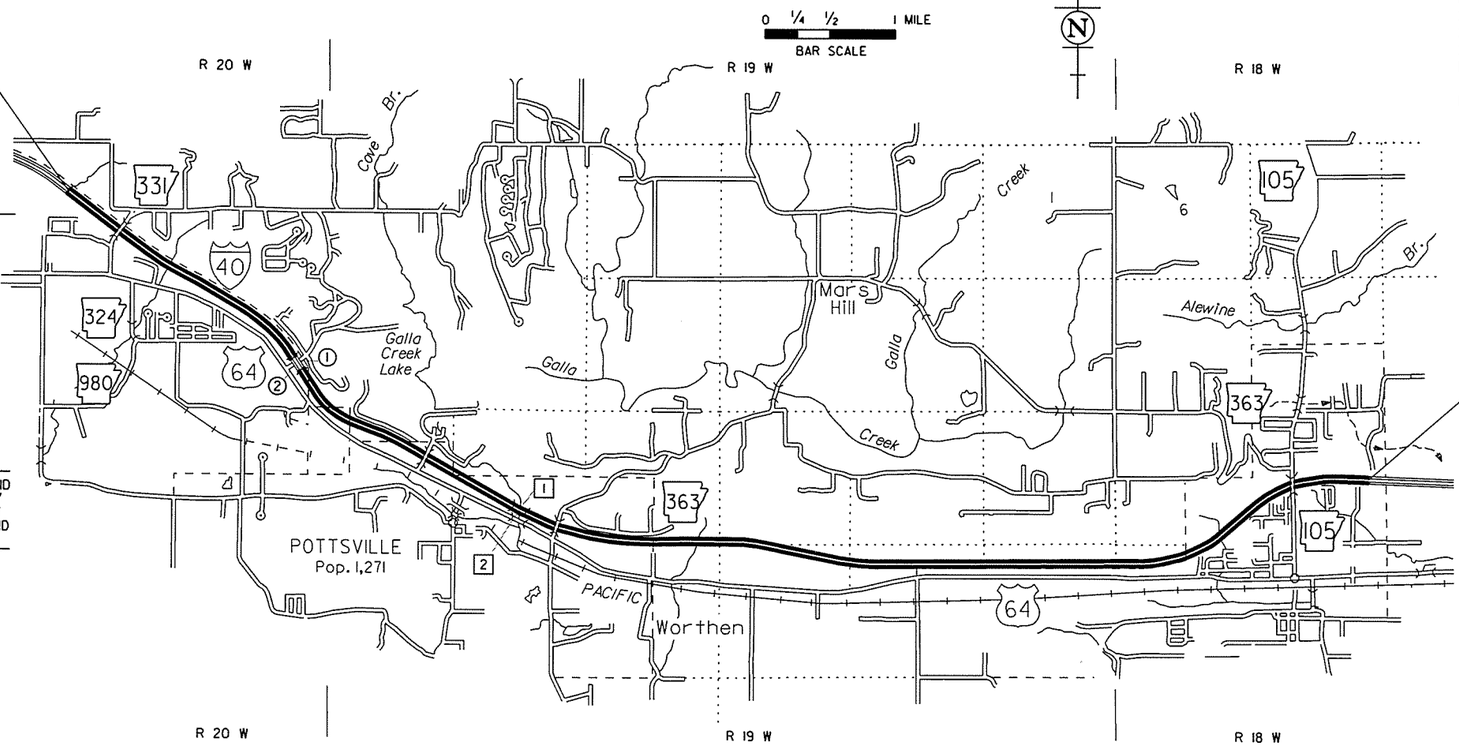


ARK. HWY. DIST. NO. 8

DESIGN TRAFFIC DATA

DESIGN YEAR	2034
2014 ADT	31,500
2034 ADT	42,000
2034 DHV	4,620
DIRECTIONAL DISTRIBUTION	0.60
TRUCKS	26%
DESIGN SPEED	70 MPH

STA. 4430+00.00
BEGIN JOB BB0805
(LOG MILE 83.6)



STA. 5003+48.78
END JOB BB0805
(LOG MILE 94.5)

BRIDGE DATA

[1] STA. 4657+85.00 BR. END
EXISTING 196.00' BRIDGE NO. A3969
39'-0" CLEAR ROADWAY
STA. 4659+81.00 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

[2] STA. 4658+11.00 BR. END
EXISTING 196.00' BRIDGE NO. B3969
39'-0" CLEAR ROADWAY
STA. 4660+07.00 BR. END
REHABILITATE BRIDGE DECK-HYDRODEMOLITION

EXCEPTION TO JOB BB0805 (BRIDGES)

① STA. 4544+20.65 BR. END
107.17' BRIDGE NO. A3967
39'-0" CLEAR ROADWAY
STA. 4545+27.82 BR. END

② STA. 4544+20.65 BR. END
107.17' BRIDGE NO. B3967
39'-0" CLEAR ROADWAY
STA. 4545+27.82 BR. END

TOTAL LENGTH OF EXCEPTIONS
107.17' MEASURED ALONG CENTERLINE

BEGINNING OF PROJECT	MID POINT OF PROJECT	END OF PROJECT
LATITUDE = N 35° 17' 16"	LATITUDE = N 35° 14' 53"	LATITUDE = N 35° 15' 11"
LONGITUDE = W 93° 06' 02"	LONGITUDE = W 93° 01' 11"	LONGITUDE = W 92° 55' 36"

LENGTH OF PROJECT CALCULATED ALONG C.L.

GROSS LENGTH OF	PROJECT	57348.78	FEET OR	10.862	MILES
NET " "	ROADWAY	57045.61	"	10.804	"
NET " "	BRIDGES	196.00	"	0.037	"
NET " "	PROJECT	57241.61	"	10.841	"

P.E. BB0805
NON-PART.

APPROVED

STATE OF ARKANSAS
3-6-14
REGISTERED PROFESSIONAL ENGINEER
No. 4215
RALPH J. HALL

DEPUTY DIRECTOR
AND CHIEF ENGINEER

2/20/2014

RBB0805.DGN

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.		BB0805	2	81

(2) INDEX OF SHEETS, GOV. SPECS, & GEN. NOTES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

INDEX OF SHEETS

GENERAL NOTES

1. ALL PIPE LINES, POWER, TELEPHONE AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AS PER AGREEMENT WITH SUCH OWNERS.

2. 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.

3. ALL LAND MONUMENTS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 107.12 OF THE STANDARD SPECIFICATIONS.

4. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM NO. 210 - UNCLASSIFIED EXCAVATION.

5. 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.

6. ANY REQUIRED EROSION CONTROL MEASURES FROM WASTING MATERIALS SHALL BE AT THE CONTRACTOR'S EXPENSE.

GOVERNING SPECIFICATIONS

ARKANSAS STATE HIGHWAY COMMISSION 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
108-1	LIQUIDATED DAMAGES
410-1	CONSTRUCTION REQUIREMENTS AND ACCEPTANCE OF ASPHALT CONCRETE PLANT MIX COURSES
620-1	MULCH COVER
JOB BB0805	BROADBAND INTERNET SERVICE FOR ASPHALT CONCRETE PLANT
JOB BB0805	CONCRETE DITCH PAVING
JOB BB0805	COORDINATION OF WORK
JOB BB0805	ELECTRONIC SUBMISSION OF ASPHALT CONCRETE HOT MIX ACCEPTANCE TEST RESULTS
JOB BB0805	EMPLOYMENT REPORTING
JOB BB0805	GOALS FOR DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION
JOB BB0805	HIGH PERFORMANCE PAVEMENT MARKING
JOB BB0805	HYDRODEMOLITION
JOB BB0805	LATEX MODIFIED CONCRETE OVERLAY
JOB BB0805	MAINTENANCE OF TRAFFIC
JOB BB0805	MANAGEMENT OF HYDRODEMOLITION WASTEWATER
JOB BB0805	MANDATORY USE OF INTERNET BIDDING
JOB BB0805	PARTNERING REQUIREMENTS
JOB BB0805	PERCENT WITHIN LIMITS
JOB BB0805	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIERS
JOB BB0805	SEQUENCE OF CONSTRUCTION
JOB BB0805	SITE USE (A + C METHOD)
JOB BB0805	STORM WATER POLLUTION PREVENTION PLAN
JOB BB0805	TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
JOB BB0805	TRENCHING AND SHOULDER PREPARATION
JOB BB0805	UNDERDRAIN FLUSHING AND REHABILITATION
JOB BB0805	UTILITY ADJUSTMENTS
JOB BB0805	VALUE ENGINEERING
JOB BB0805	WARM MIX ASPHALT
JOB BB0805	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS
JOB BB0805	WIRE ROPE SAFETY FENCE (POST REPAIR)
JOB BB0805	WIRE ROPE SAFETY FENCE (WRSF) SPECIFICATIONS
JOB BB0805	WRSF TRAINING WORKSHOP

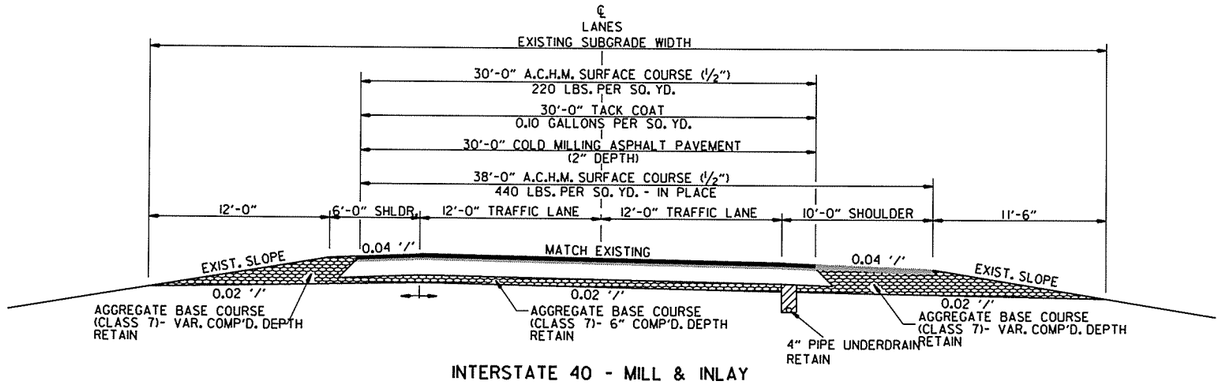
2/21/2014

RBB0805.DGN

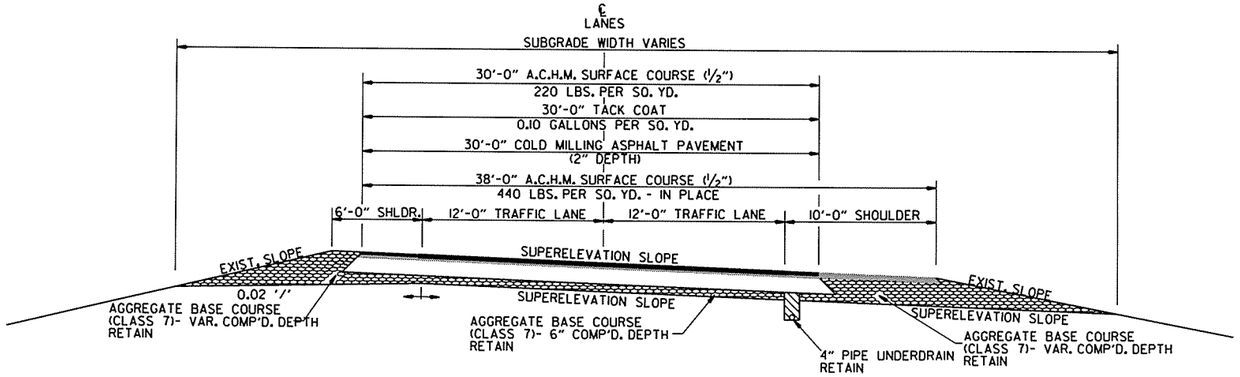
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	3	81

(2) TYPICAL SECTIONS OF IMPROVEMENT

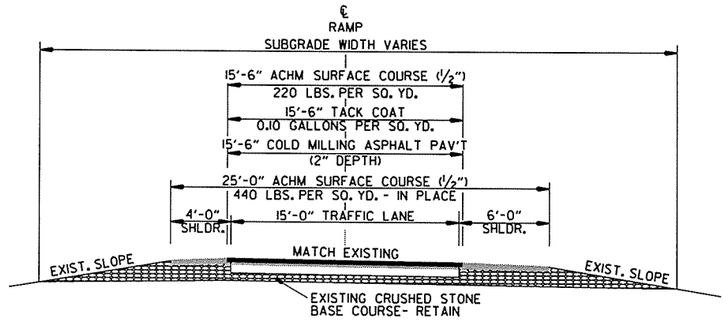
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



INTERSTATE 40 - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)



INTERSTATE 40 WITH SUPERELEVATION - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)



TYPICAL RAMP - MILL & INLAY
(SHOWN IN DIRECTION OF TRAFFIC)

2/19/2014

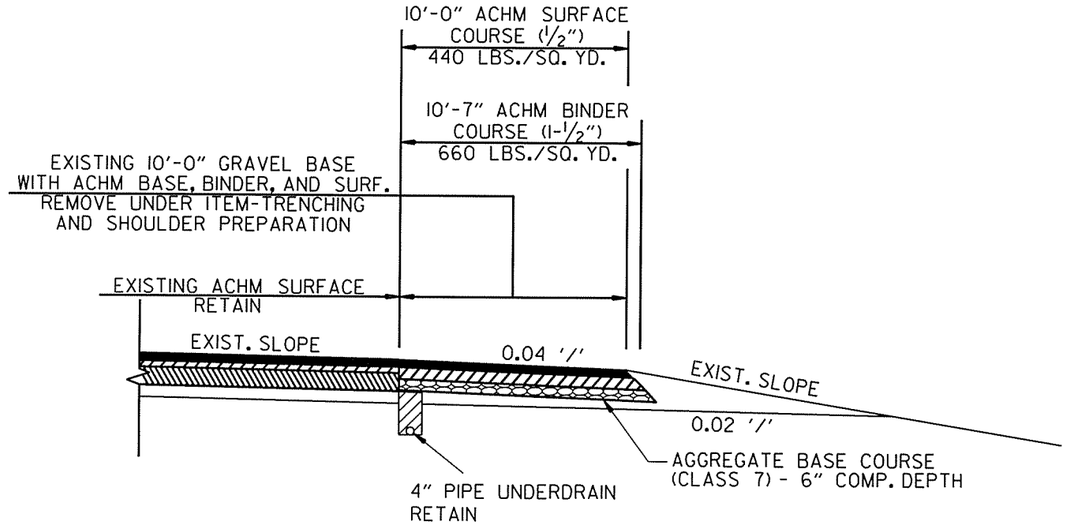
RBB0805.DGN

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.		BB0805	4	81

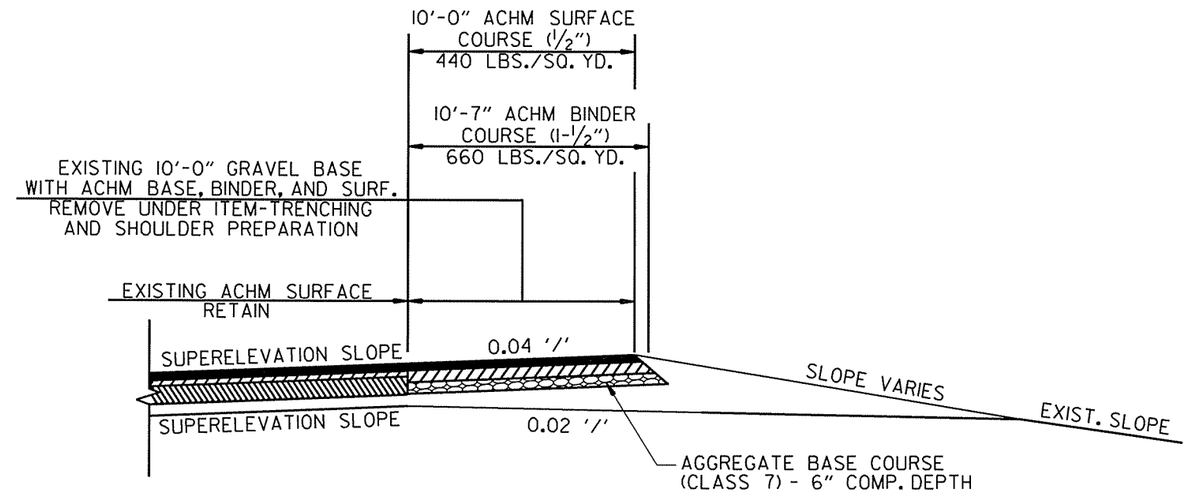
(2) TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



TYPICAL SECTION OF SHOULDER RECONSTRUCTION
FOR MAINTENANCE OF TRAFFIC

STA. 4655+08.84 TO STA. 4657+48.84 (LT. OF LT. MAIN LANES)
STA. 4660+25.01 TO STA. 4662+65.01 (LT. OF LT. MAIN LANES)



TYPICAL SECTION OF SHOULDER RECONSTRUCTION
FOR MAINTENANCE OF TRAFFIC

STA. 4655+34.81 TO STA. 4657+74.81 (RT. OF RT. MAIN LANES)
STA. 4660+49.51 TO STA. 4662+89.51 (RT. OF RT. MAIN LANES)

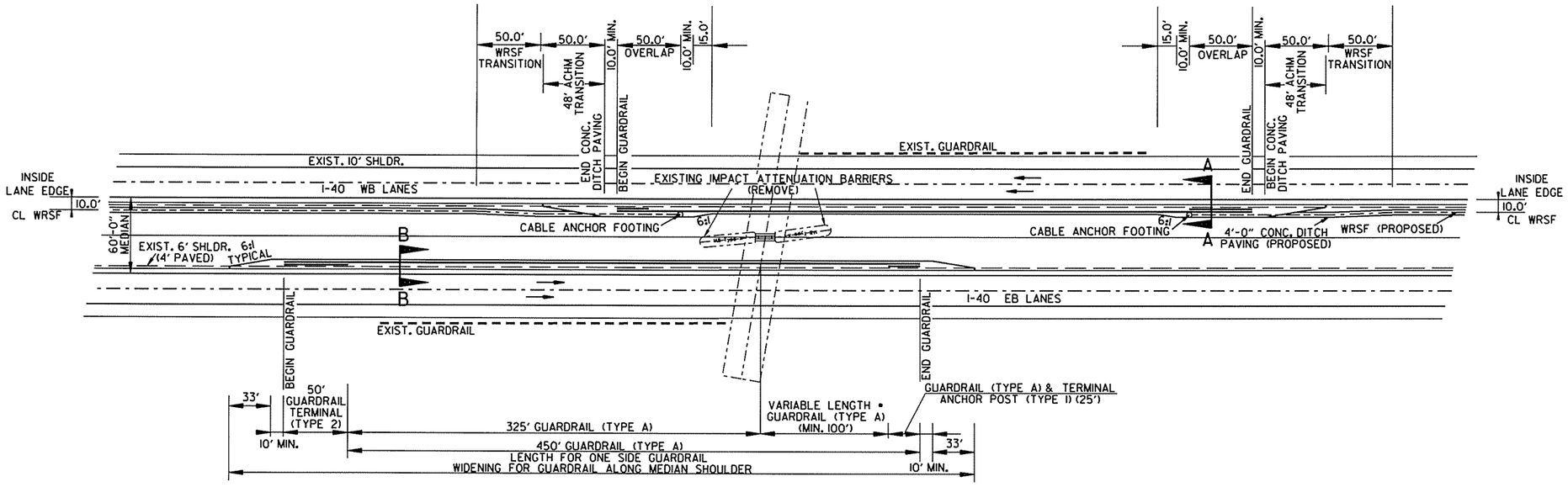
RBB0805.DGN 2/19/2014

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.		BB0805	5	81

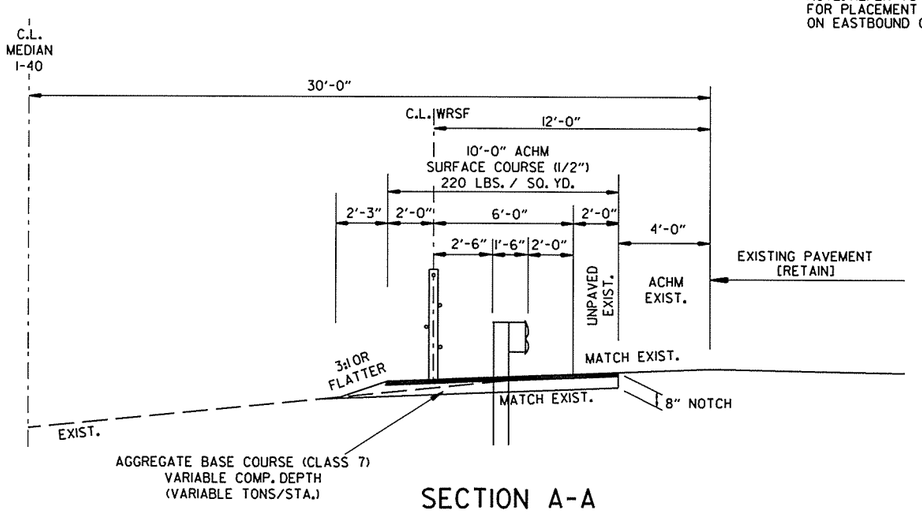
(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

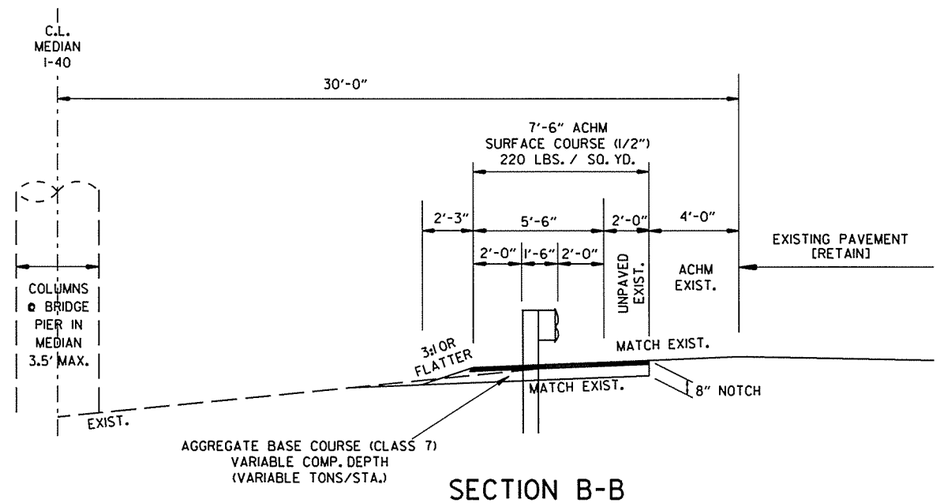


DETAIL AT OVERPASSES

NOTE: REFER TO PLAN SHEETS FOR PLACEMENT OF WIRE ROPE SAFETY FENCE ON EASTBOUND OR WESTBOUND FORESLOPES.



SECTION A-A



SECTION B-B

DETAILS OF SHOULDER WIDENING FOR GUARDRAIL AND OVERLAPS WITH ENDS OF WIRE ROPE SAFETY FENCE

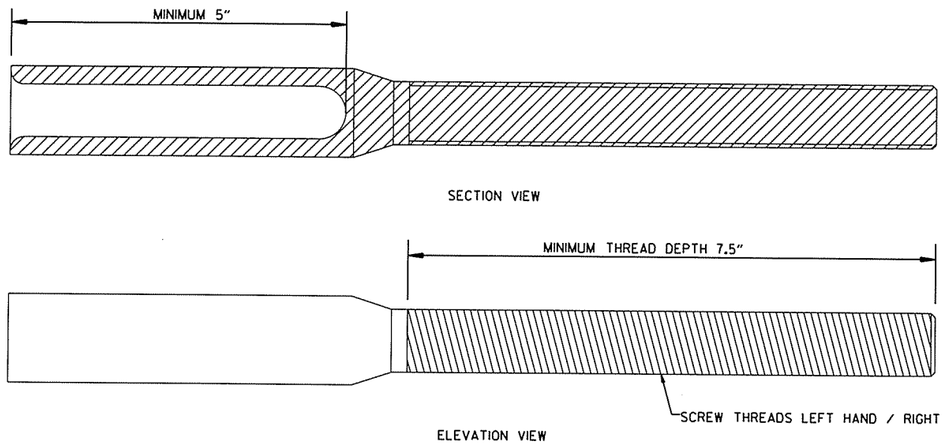
2/20/2014

RBB0805.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
3-24-14				6	ARK.			
				JOB NO.		BB0805	6	81

(2) SPECIAL DETAILS

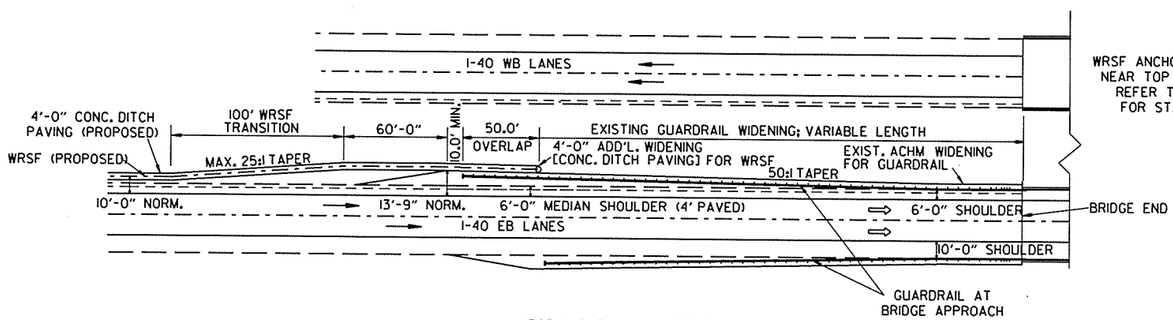
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
3-24-14

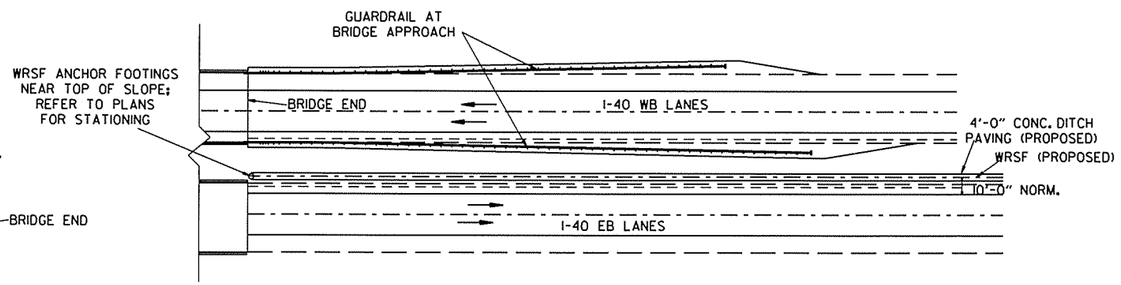


NOTE:

1. ALL THREADED STUDS SHALL BE ONE PIECE CONSTRUCTION. TWO PIECE PINNED THREADED RODS & SWAGE BARRELS ARE NOT PERMITTED.
2. AFTER SWAGING OF ROPE AND STUD FITTING, FITTED ROPE ASSEMBLY SHALL MEET MINIMUM BREAKING LOAD (MBL) OF 36,800 POUNDS.
3. EACH PROJECT SHALL HAVE FULLY FITTED ROPE ASSEMBLY (ROPE-THREADED STUD - RIGGING SCREW - THREADED STUD - ROPE) PROOF TESTED BY INDEPENDENT TESTING FACILITY AND PROVIDE TEST RESULTS EXCEEDING MINIMUM BREAKING LOAD (MBL).
4. ALL THREADED STUDS SHALL BE FACTORY SWAGED ON ROPE.
5. MAXIMUM DISTANCE BETWEEN THREADED STUDS SHALL BE 1010'.

THREADED TERMINAL DETAIL





DETAIL OF WIRE ROPE SAFETY FENCE AT EXISTING BRIDGE ENDS

REFER TO PLANS FOR RELATIVE PLACEMENT OF GUARDRAIL AND WIRE ROPE SAFETY FENCE AT EACH BRIDGE END

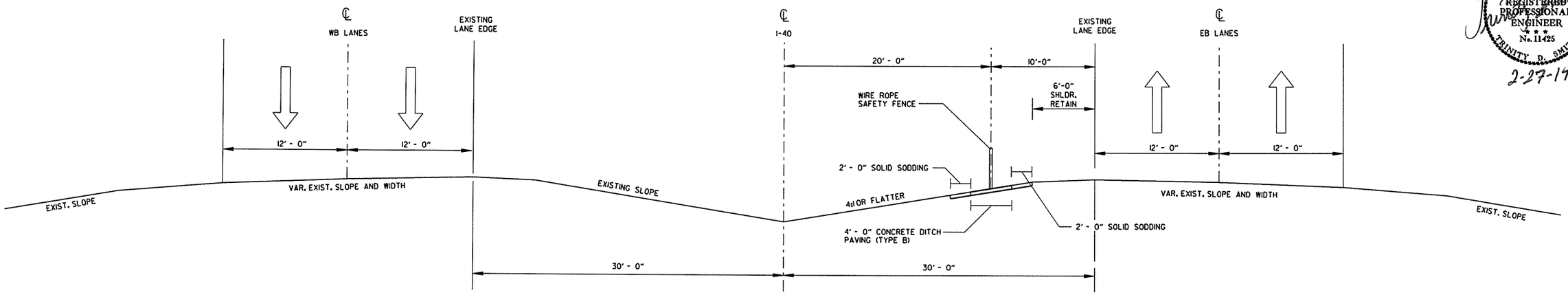
3/24/2014

RBB1103.DGN

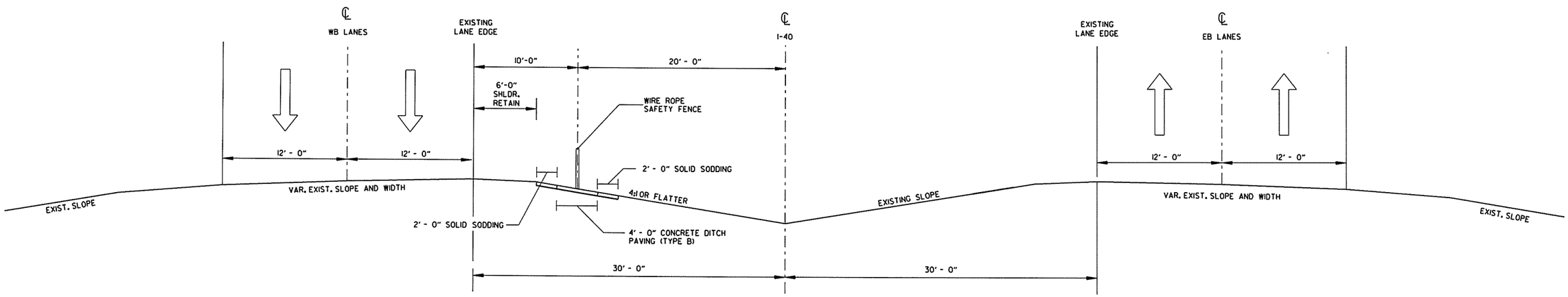
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	7	81

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE RIGHT OF CENTERLINE



TYPICAL SECTION OF IMPROVEMENT
FOR WIRE ROPE SAFETY FENCE LEFT OF CENTERLINE

2/20/2014

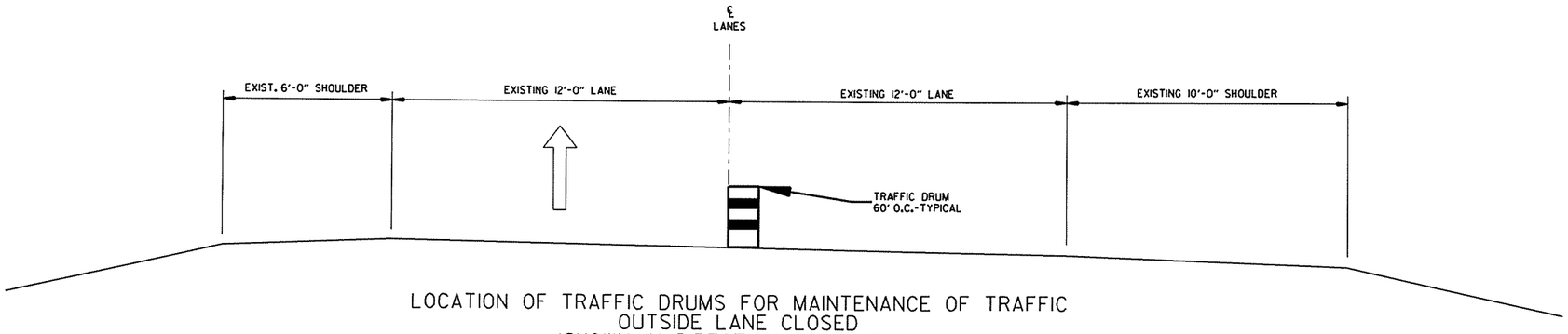
RBB0805.DGN

SPECIAL DETAILS

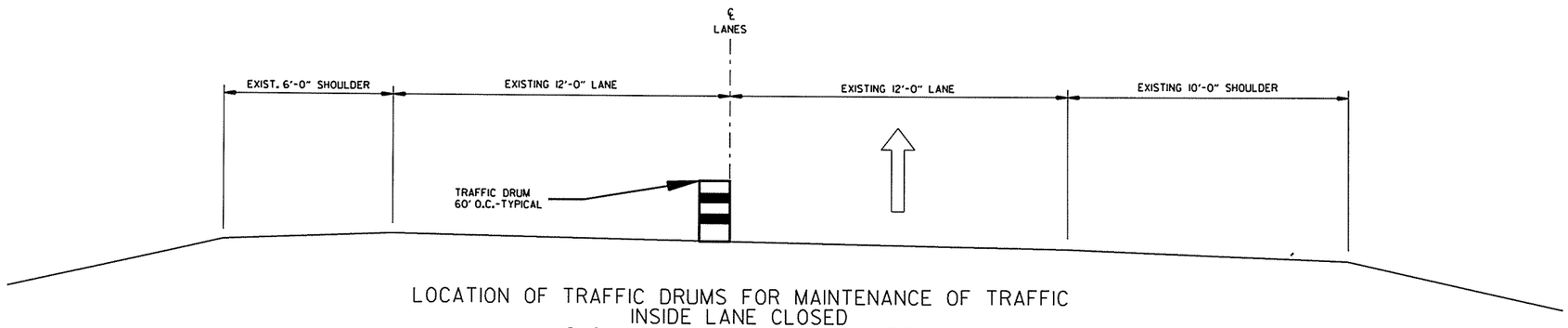
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	8	81

(2) SPECIAL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
OUTSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)



LOCATION OF TRAFFIC DRUMS FOR MAINTENANCE OF TRAFFIC
INSIDE LANE CLOSED
(SHOWN IN DIRECTION OF TRAFFIC)

RBB0805.DGN 2/20/2014

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
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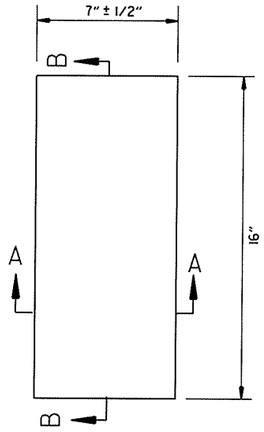
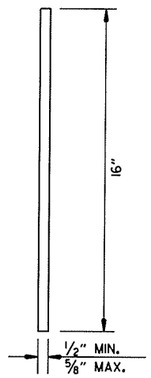
				JOB NO.		BB0805	9	81

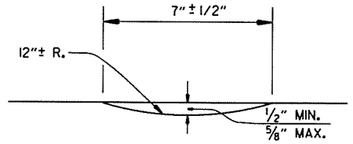
(2) SPECIAL DETAILS



PLAN

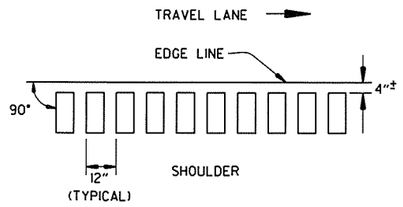


SECTION B-B

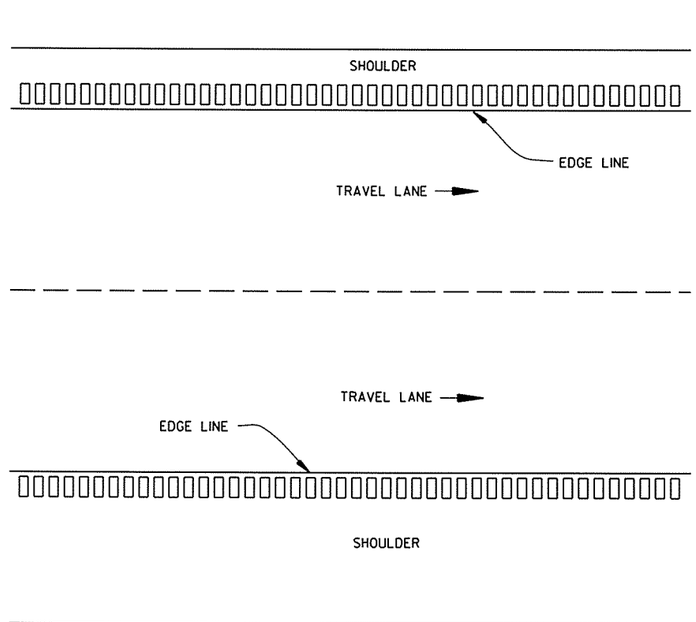


SECTION A-A

DETAILS OF RUMBLE STRIPS



LOCATION PLAN OF RUMBLE STRIPS
LEFT OR RIGHT SHOULDER



PLAN VIEW

NOTES:

1. ALIGNMENT OF RUMBLE STRIPS SHALL GENERALLY BE STRAIGHT AND OFFSET APPROXIMATELY 4" FROM THE OUTER EDGE OF THE EDGE LINE. THIS OFFSET MAY BE ADJUSTED TO ACCOMMODATE VARIATIONS IN THE EDGE LINE.
2. THE 1/2" DEPTH SHALL GENERALLY APPLY FOR THE ENTIRE 16" LENGTH. SOME VARIATION TO SUIT SHOULDER SLOPE BREAKS MAY BE NECESSARY.
3. RUMBLE STRIPS SHALL NOT BE INSTALLED ON BRIDGE DECKS, APPROACH SLABS, OR ACROSS TRANSVERSE JOINTS OF CONCRETE SHOULDERS.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

2/20/2014

RBB0805.DGN

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.			
				JOB NO.		BB0805	10	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
2-27-14
TRINITY D. SMITH

STA. 4430+00.00
BEG. JOB BB0805
BEG. MILL & INLAY
END JOB BB0804
LOG MILE 83.6

EXIST. R/W & C. OF A.

4430 4435 S 50°56'03" E 4440 4445

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W & C. OF A.

4445 4450 S 50°56'03" E 4455 4460

E-5 @ 00

E-7

STA. 4454+88
END WRSF JOB BB0804

STA. 4456+40
BEG. WRSF

HWY. 331
BR. NO. 06666

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	11	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11435
5-22-14
TRINITY D. SMITH

A.

PC 4465+16.82

EXIST. R/W & C. OF A.

4460 — S 50°56'03" E — 4465 — 4470 — 4475

WRSF AND CONCRETE DITCH PAVING

PI 4471+95.83

EXIST.

EXIST. R/W & C. OF A.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 SAND BAG DITCH CHECKS
- E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W

EXIST. C. OF A.

EXIST. R/W

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

PT 4478+72.87

4475 — 4480 — S 58°30'03" E — 4485 — E-7 — E-5 — 4490

WRSF AND CONCRETE DITCH PAVING

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

2/20/2014

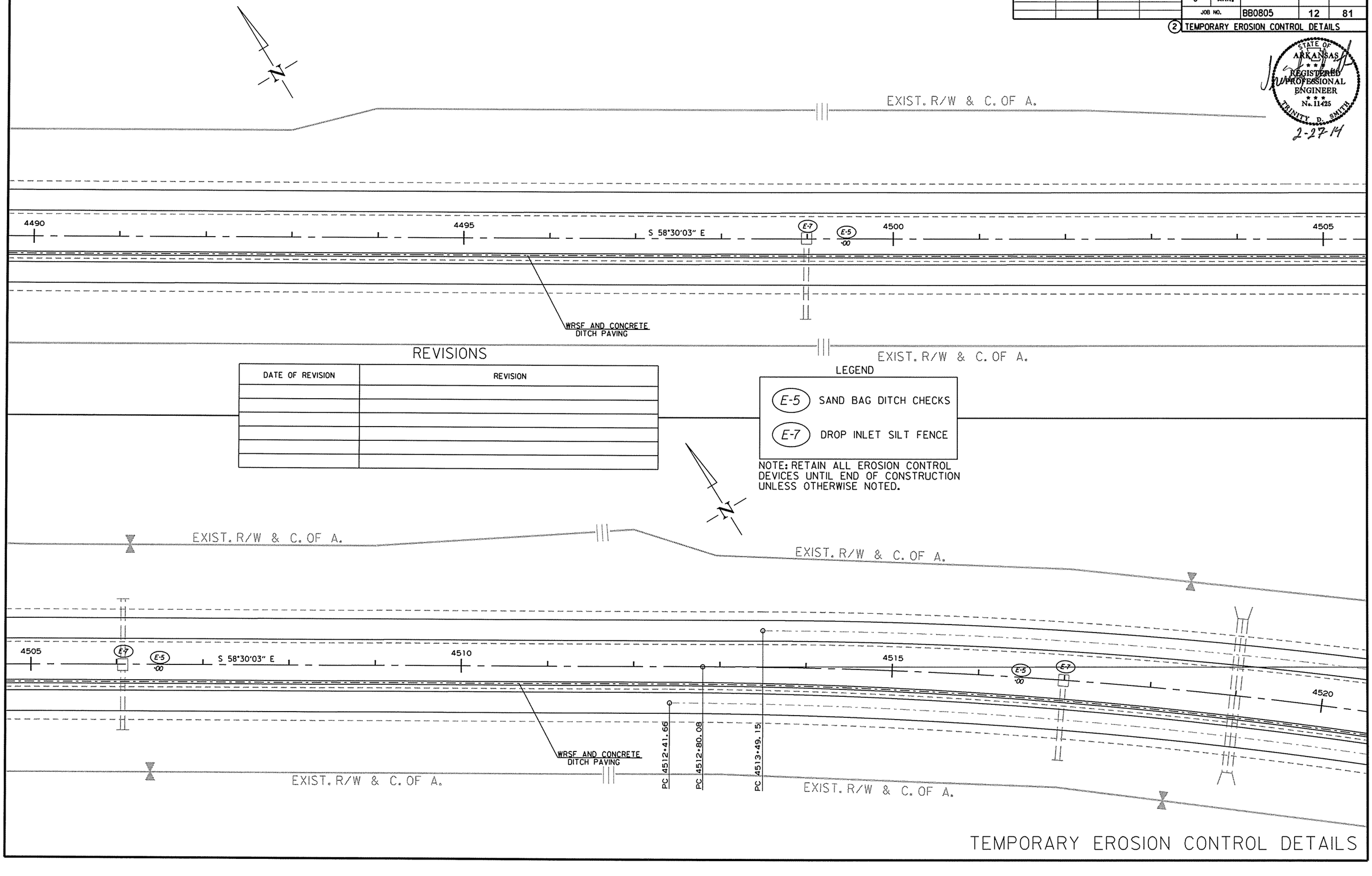
RBB0805.DGN

TEMPORARY EROSION CONTROL DETAILS

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	12	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	13	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

P.I. 4526+77.46

EXIST. R/W

EXIST. R/W & C. OF A.

EXIST. C. OF A.

4520 4525 4530 4535

WRSF AND CONCRETE DITCH PAVING

REVISIONS

DATE OF REVISION	REVISION

FURNITURE RD.

LEGEND

- (E-5) SAND BAG DITCH CHECKS
- (E-7) DROP INLET SILT FERCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

BR. END STA. 4544+20.65

OLD COVE RD

BR. END STA. 4545+27.82

BR. NO. A3967

4535 4540 4545 4550

S 31°23'03" E

BR. NO. B3967

PT 4539+77.48

PT 4540+22.47

PT 4540+35.80

STA. 4541+46
END WRSF

STA. 4545+38
BEG. WRSF

NOTE: BRIDGE NO. A3967 & B3967 ARE EXCEPTIONS TO JOB BB0805

TEMPORARY EROSION CONTROL DETAILS

2/20/2014

RBB0805.DGN

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.		BB0805	14	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

PC 4555+57.03

4550 E-5 E-7 S 31°23'03" E 4555 4560 4565

REVISIONS

DATE OF REVISION	REVISION

STA. 4555+00
END WRSF
LOG MILE 86.00

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. C. OF A.

EXIS

4565 4570 4575 4580

EX

ST. R/W & C. OF A.

EXIST. R/W & C. OF A.

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	15	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
1-27-14
TRINITY D. SMITH

EXIST. R/W

EXIST. C. OF A.

EXIST. R/W

EXIST. C. OF A.

PI 4593+04.21

4580

S 67°23'03" E

4585

4590

4595

PT 4581+10.23

PC 4587+40.31

PC 4588+60.88

PC 4589+68.65

STA. 4591+65
BEGIN WRSF
LOG MILE 86.70

EXIST. R/W & C. OF A.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W

BEAR MT. LN.

EXIST. R/W

CALLA PARK RD.

STA. 4608+72
END WRSF

EXIST. C. OF A.

EXIST. C. OF A.

4595

4600

E-5 -00

E-7

S 58°40'03" E

4605

4610

PT 4595+05.11

PT 4597+45.83

PT 4598+47.44

BR. NO. 03968

EXIST. R/W & C. OF A.

TEMPORARY EROSION CONTROL DETAILS

2/20/2014

RBB0805.DGN

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.		BB0805	16	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W

EXIST. R/W & C. OF A.

4610 E-5 -00 E-7 4615 4620 E-5 -00 E-7 S 58°40'03" E 4625

STA. 4612+72
BEG. WRSF

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) SAND BAG DITCH CHECKS

(E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

/W & C. OF A.

EXIST. R/W & C. OF A.

WRSF AND CONCRETE DITCH PAVING

4625 E-5 -00 E-7 4630 S 58°40'03" E E-5 -00 4635 E-7 4640

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

TEMPORARY EROSION CONTROL DETAILS

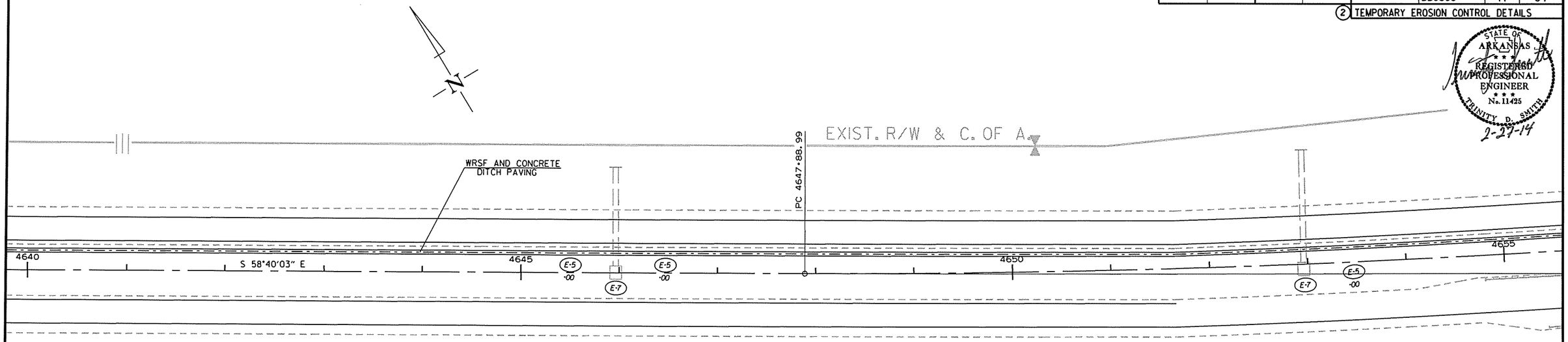
2/20/2014

RBB0805.DGN

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.		BB0805	17	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



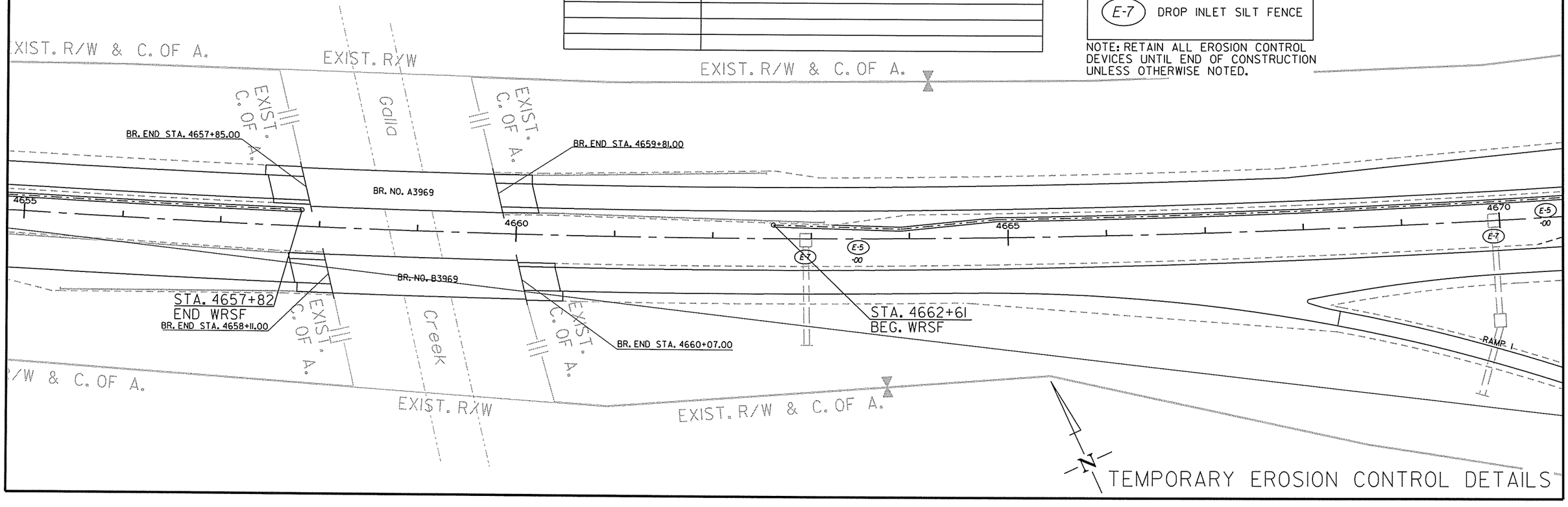
REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 SAND BAG DITCH CHECKS
- E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.



2/26/2014

RBB0805.DGN

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.		BB0805	18	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11725
1-27-14
TRINITY D. SMITH

EXIST. R/W & C. OF A.

PINE RIDGE RD.

BR. NO. 03970

RAMP 4

RAMP 3

4670

E-7

E-5 .00

4675

E-7

E-5 .00

4680

E-7

E-5 .00

4685

RAMP 1

STA. 4673+80
END WRSF

STA. 4675+29
BEG. WRSF

N

RAMP 2

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION

EXIST. R/W

EXIST. R/W

EXIST. R/W

MOUNTIAN BASE RD.

EXIST. C. OF A.

EXIST. C. OF A.

4685

E-7

E-5 .00

4690

4695

E-7

E-5 .00

4700

WRSF AND CONCRETE DITCH PAVING

N

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

2/20/2014

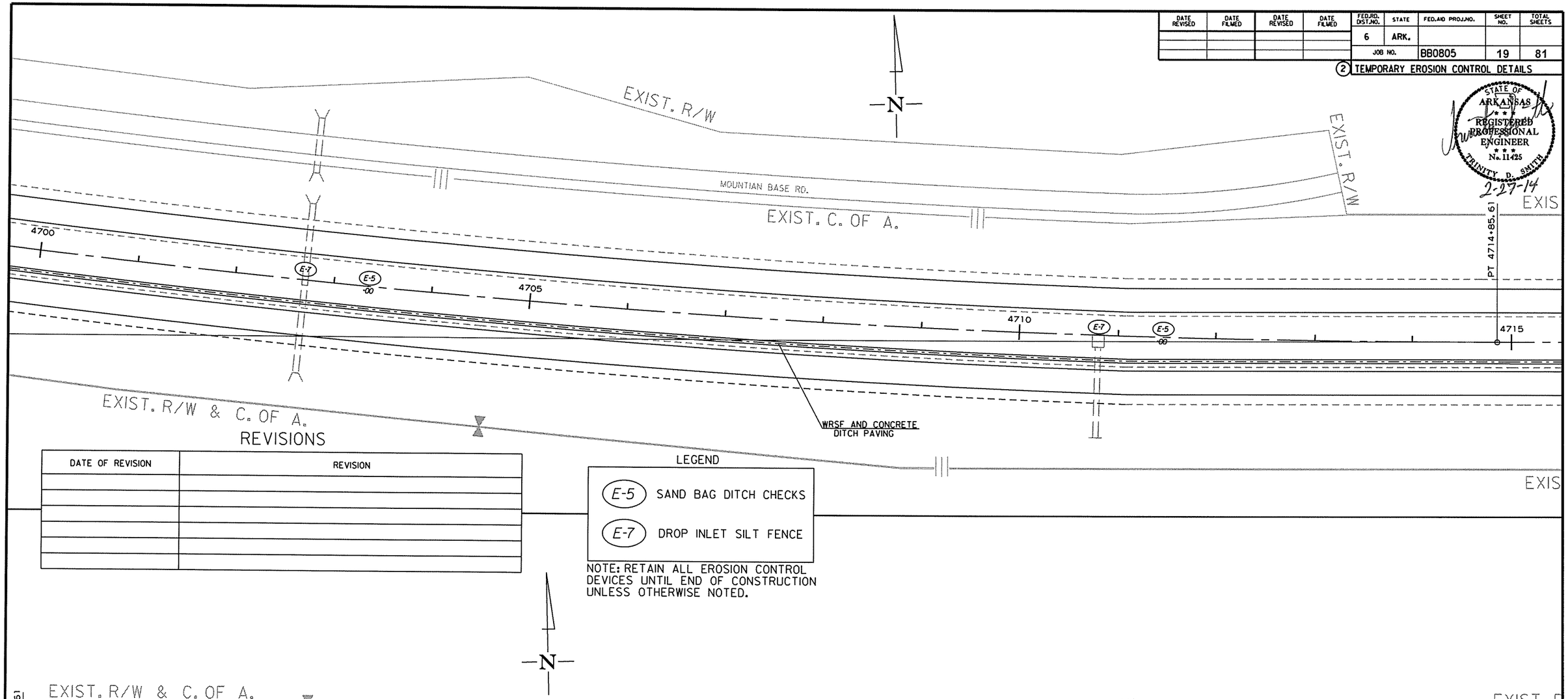
RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	19	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	20	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

4730 E-5 .00 E-7 E-5 .00 4735 S 88°28'02" E E-7 E-5 .00 4740 4745

WRSF AND CONCRETE DITCH PAVING

PC 4743+05.59

PC 4745+01.13

EXIST. R/W & C. OF A.

REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 SAND BAG DITCH CHECKS
- E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

PI 4752+31.38

EXIST. R/W & C. OF A.

4745 E-7 E-5 .00 4750 4755 4760

PC 4745+01.13

STA. 4750+05
END WRSF
LOG MILE 89.70

PT 4759+53.36

EXIST. R/W & C. OF A.

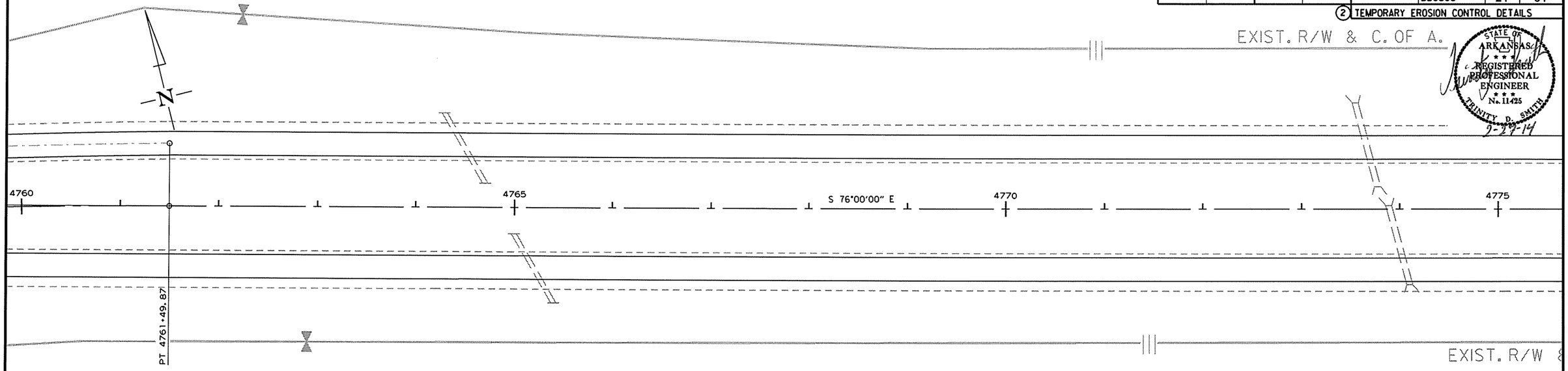
TEMPORARY EROSION CONTROL DETAILS

2/20/2014

RBB0805.DGN

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.		BB0805	21	81

(2) TEMPORARY EROSION CONTROL DETAILS



STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
9-27-14

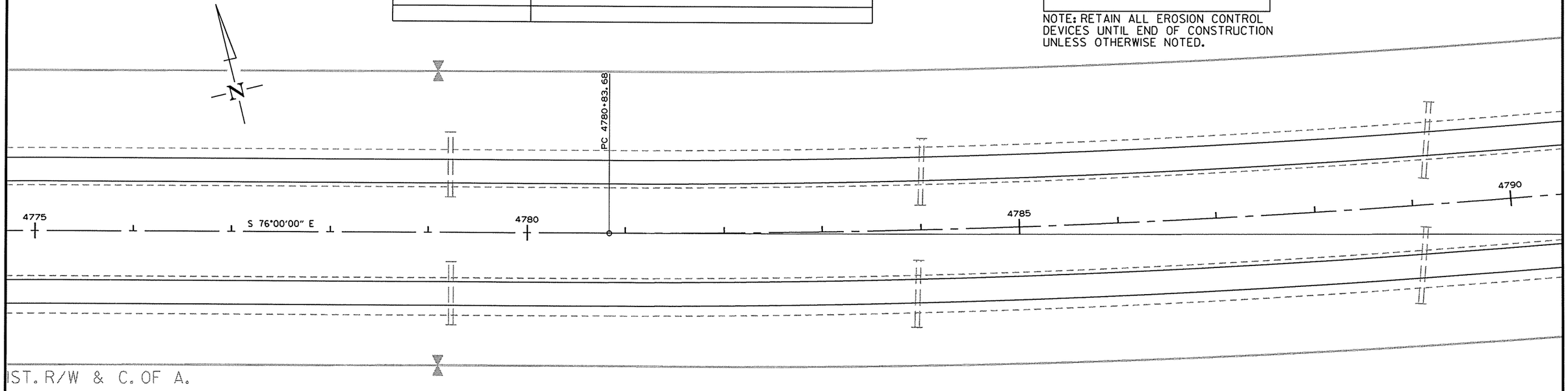
REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) SAND BAG DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.



2/20/2014

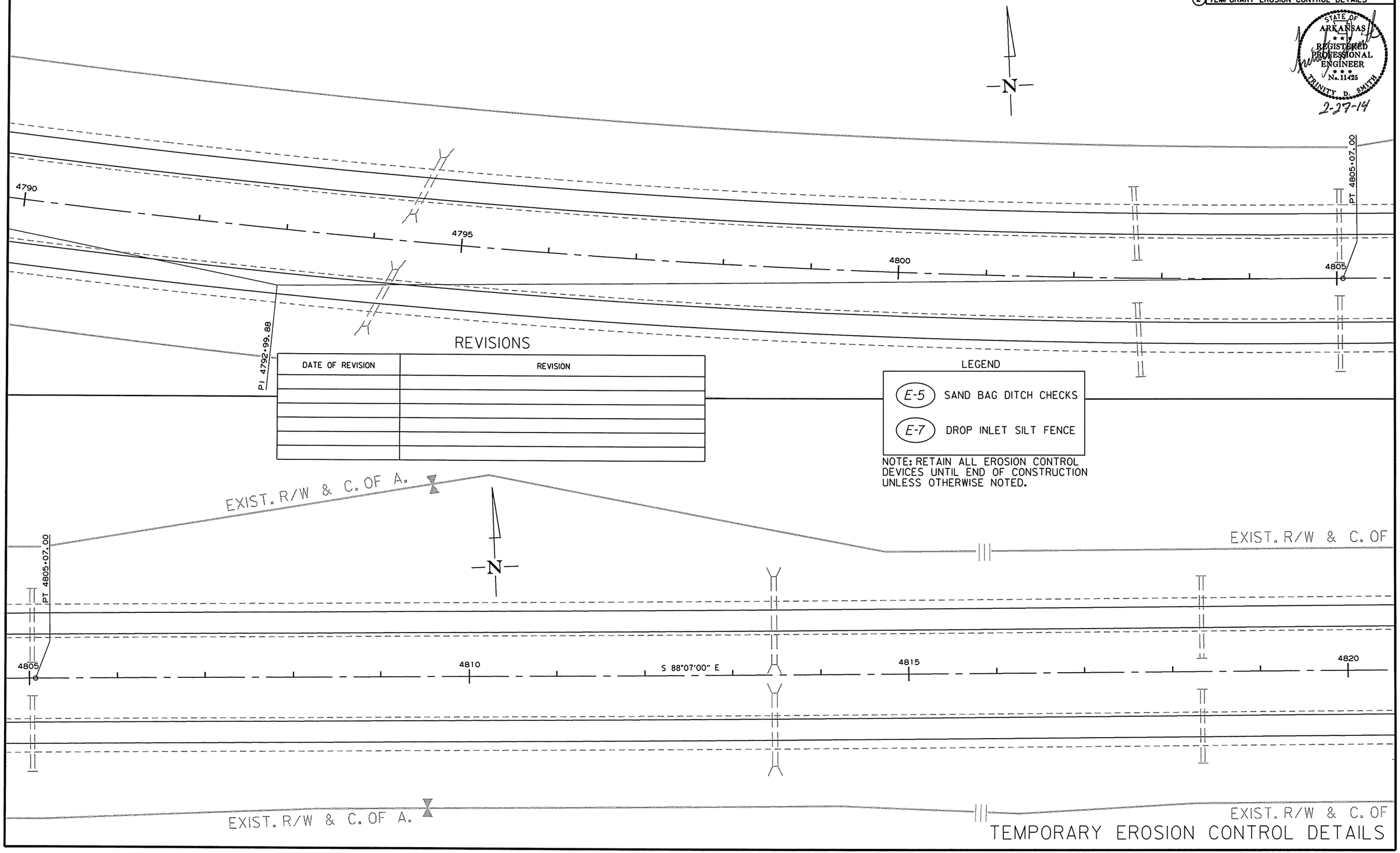
RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	22	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) SAND BAG DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

2/20/2014

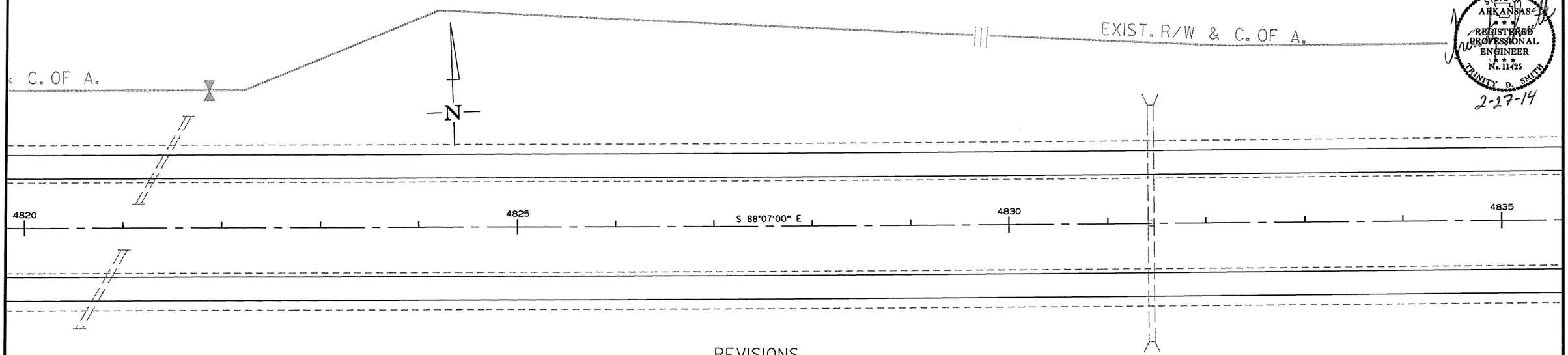
RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	23	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

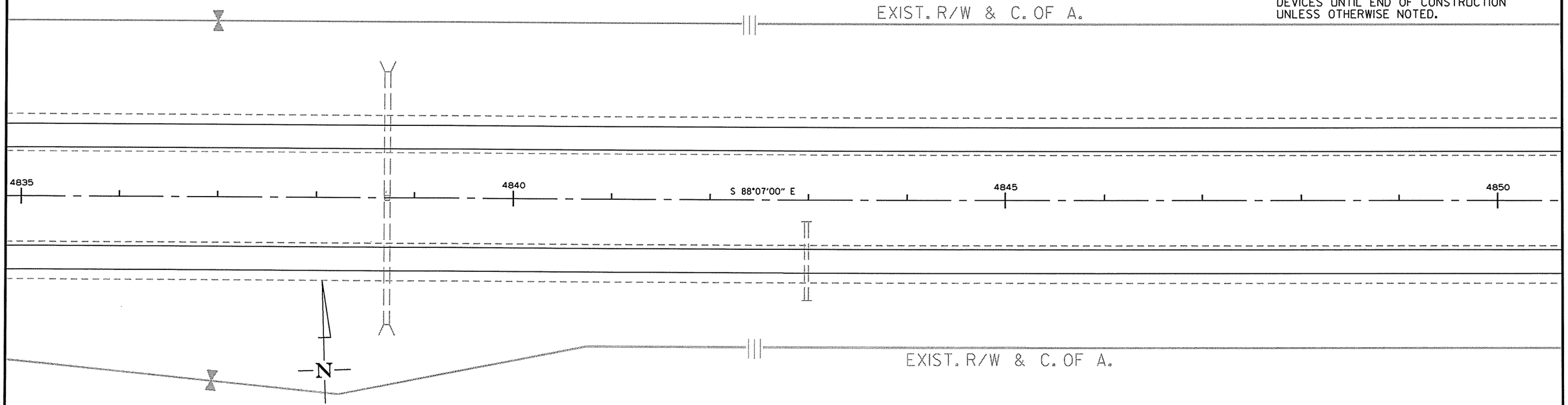
DATE OF REVISION	REVISION

LEGEND

(E-5) SAND BAG DITCH CHECKS

(E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.



2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	24	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

4850 4855 S 88°07'00" E 4860 4865

EXIST. R/W & C. OF A.

N

REVISIONS

DATE OF REVISION	REVISION

LEGEND

(E-5) SAND BAG DITCH CHECKS

(E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

EXIST. R/W & C. OF A.

N

4865 4870 S 88°07'00" E 4875 4880

EXIST. R/W & C. OF A.

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	25	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

N

4880 4885 S 88°07'00" E 4890 4895

EXIST. R/W & C. OF A.

EXIST. R/W & C

REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

R/W & C. OF A.

EXIST. R/W & C. OF A.

N

PC 4904+19.92
PC 4904+26.83
PC 4904+34.08

4895 S 88°07'00" E 4900 4905 4910

/W & C. OF A.

EXIST. R/W & C. OF A.

2/20/2014

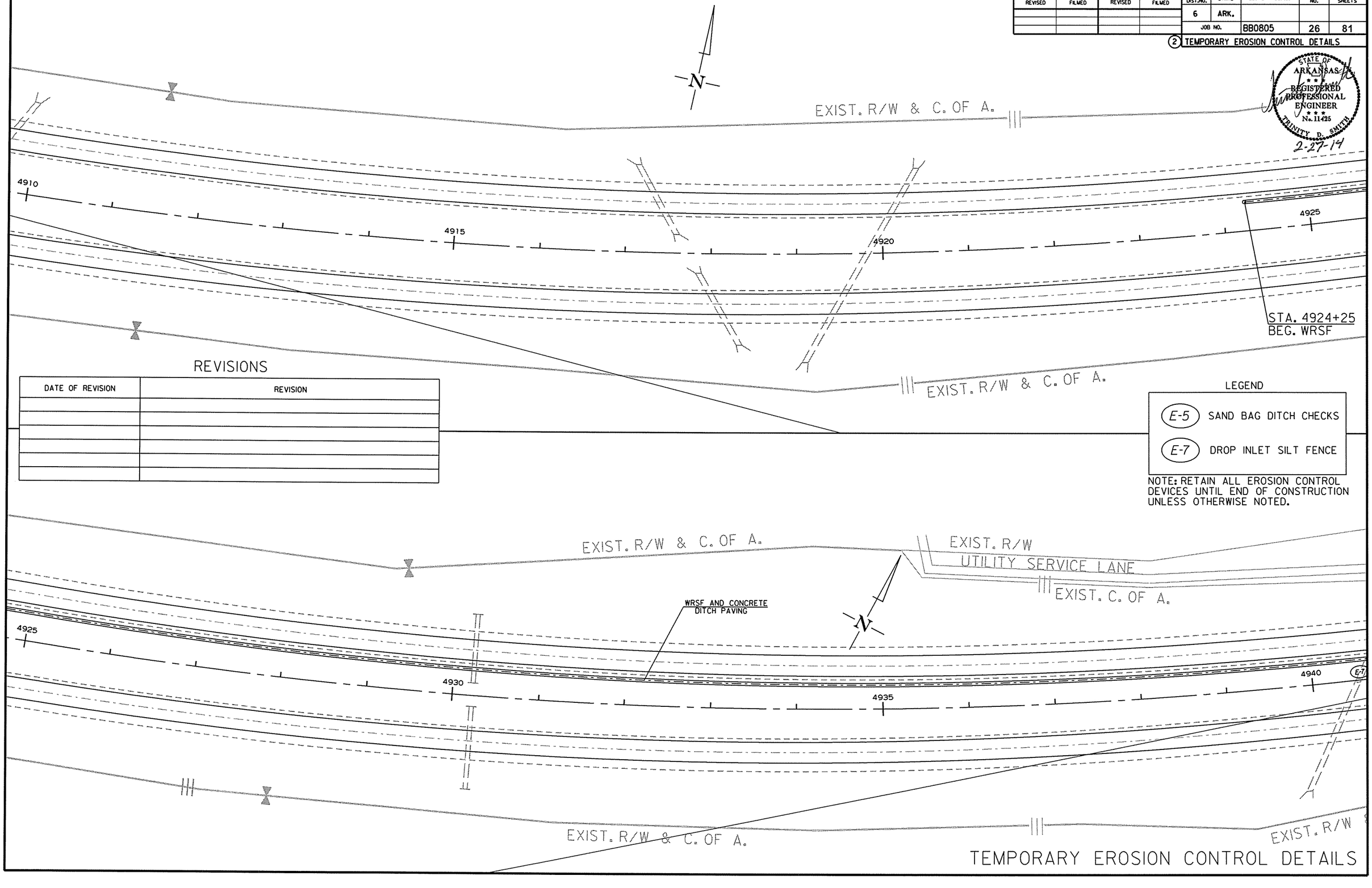
RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	26	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

DATE OF REVISION	REVISION

LEGEND

- (E-5) SAND BAG DITCH CHECKS
- (E-7) DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

2/20/2014

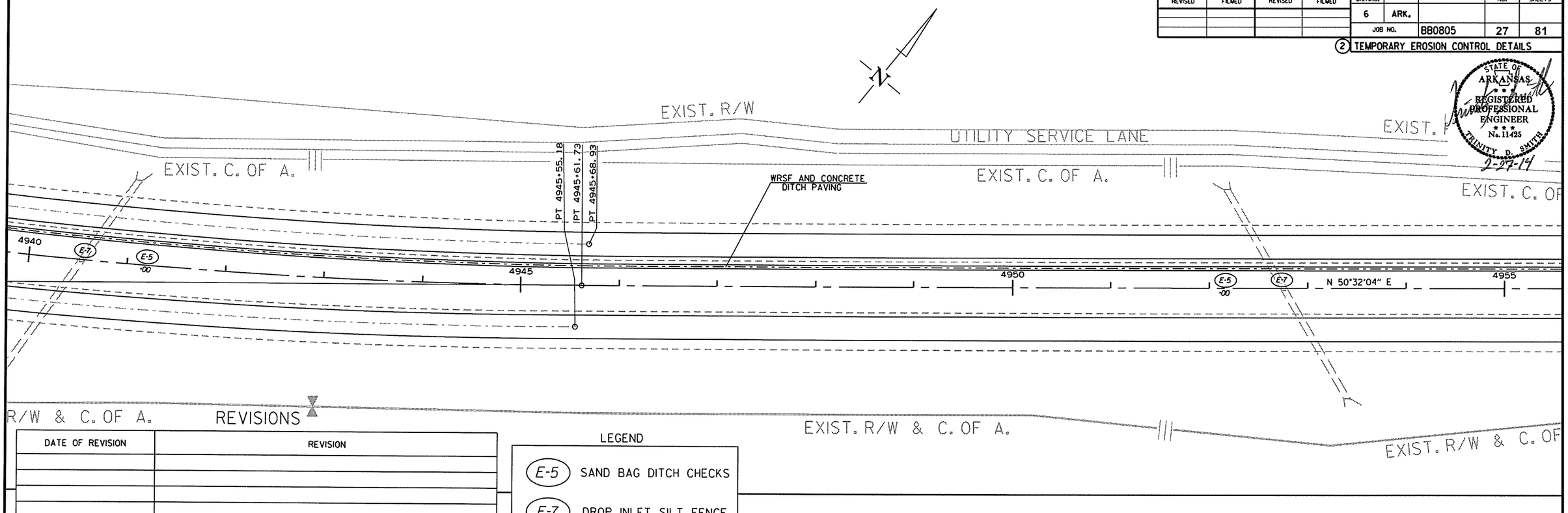
RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	27	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



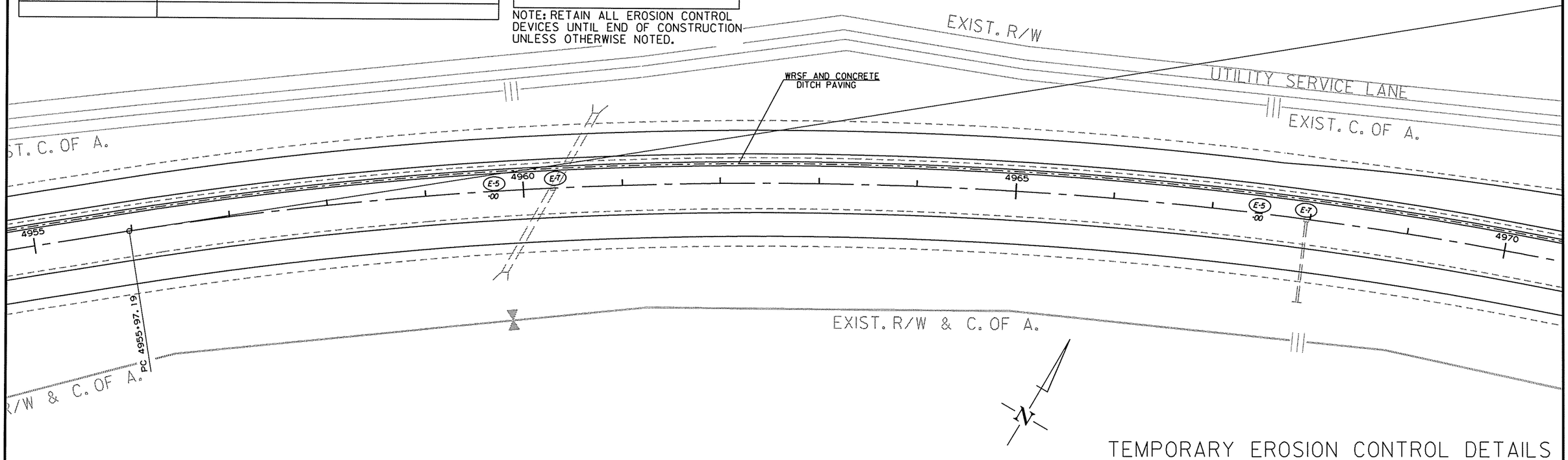
REVISIONS

DATE OF REVISION	REVISION

LEGEND

- E-5 SAND BAG DITCH CHECKS
- E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.



TEMPORARY EROSION CONTROL DETAILS

2/20/2014

RBB0805.DGN

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.		BB0805	28	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

PI 4974+55.62

EXIST. R/W

EXIST. R/W & C. OF A.

STA. 4974+93
END WRSF
JOB BB0805

BR. NO. 03978

STA. 4976+30
BEGIN WRSF
JOB BB0806

RAMP 4

RAMP 3

EXIST. R/W & C. OF A.

4970

4975

4980

4985

E-5 -00

E-7

RAMP 1

RAMP 2

HWY. 105

EXIST. R/W & C. OF A.

EXIST. R/W

EXIST. R/

RAMP 3

RAMP 4

N

LEGEND

E-5 SAND BAG DITCH CHECKS

E-7 DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

REVISIONS

DATE OF REVISION	REVISION

TEMPORARY EROSION CONTROL DETAILS

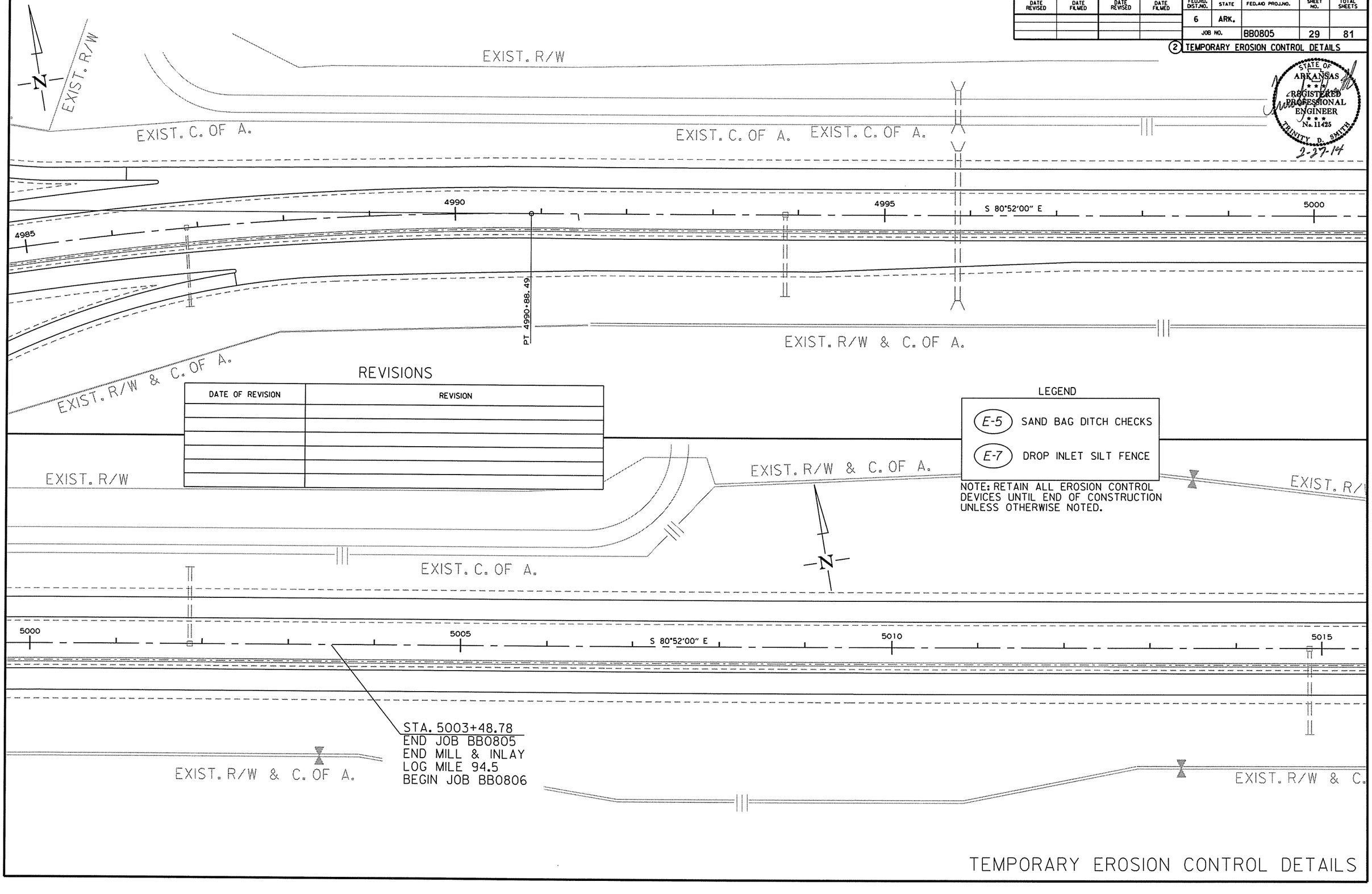
2/20/2014

RBB0805.DGN

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.		BB0805	29	81

(2) TEMPORARY EROSION CONTROL DETAILS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



REVISIONS

DATE OF REVISION	REVISION

LEGEND

E-5	SAND BAG DITCH CHECKS
E-7	DROP INLET SILT FENCE

NOTE: RETAIN ALL EROSION CONTROL DEVICES UNTIL END OF CONSTRUCTION UNLESS OTHERWISE NOTED.

2/20/2014

RBB0805.DGN

TEMPORARY EROSION 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.			
				JOB NO.		BB0805	30	81

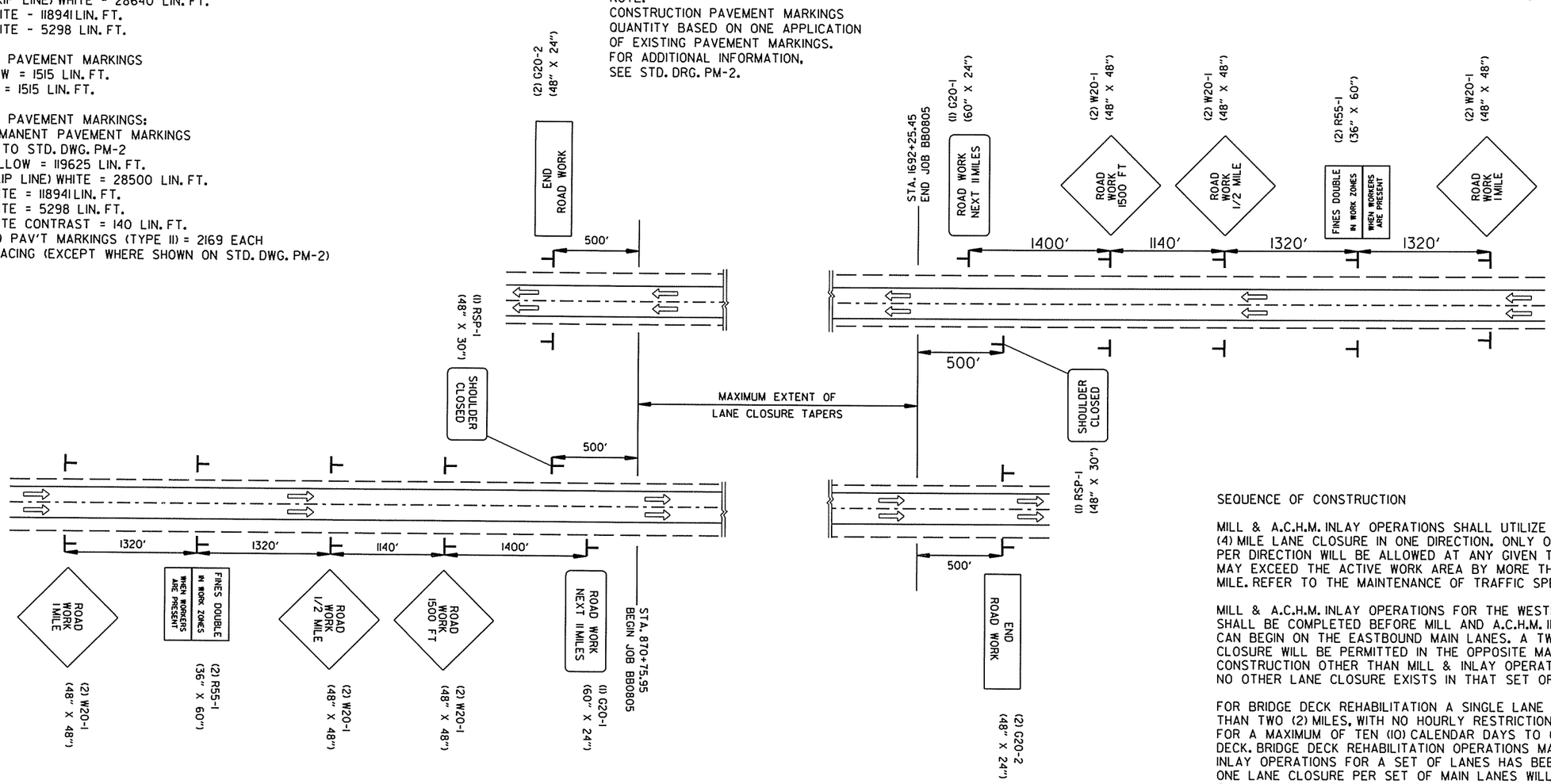
(2) MAINTENANCE OF TRAFFIC

CONSTRUCTION PAVEMENT MARKINGS:
APPLY CONSTRUCTION PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW - 119625 LIN. FT.
- 4" (SKIP LINE) WHITE - 28640 LIN. FT.
- 4" WHITE - 11894 I LIN. FT.
- 8" WHITE - 5298 LIN. FT.

REMOVABLE PAVEMENT MARKINGS
- YELLOW = 1515 LIN. FT.
- WHITE = 1515 LIN. FT.

PERMANENT PAVEMENT MARKINGS:
APPLY PERMANENT PAVEMENT MARKINGS
ACCORDING TO STD. DWG. PM-2
- 4" YELLOW = 119625 LIN. FT.
- 4" (SKIP LINE) WHITE = 28500 LIN. FT.
- 4" WHITE = 11894 I LIN. FT.
- 8" WHITE = 5298 LIN. FT.
- 4" WHITE CONTRAST = 140 LIN. FT.
- RAISED PAV'T MARKINGS (TYPE II) = 2169 EACH
- 80' SPACING (EXCEPT WHERE SHOWN ON STD. DWG. PM-2)

NOTE:
CONSTRUCTION PAVEMENT MARKINGS QUANTITY BASED ON ONE APPLICATION OF EXISTING PAVEMENT MARKINGS. FOR ADDITIONAL INFORMATION, SEE STD. DRG. PM-2.



SEQUENCE OF CONSTRUCTION

MILL & A.C.H.M. INLAY OPERATIONS SHALL UTILIZE A SINGLE FOUR (4) MILE LANE CLOSURE IN ONE DIRECTION. ONLY ONE LANE CLOSURE PER DIRECTION WILL BE ALLOWED AT ANY GIVEN TIME. NO LANE CLOSURE MAY EXCEED THE ACTIVE WORK AREA BY MORE THAN ONE QUARTER (1/4) MILE. REFER TO THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

MILL & A.C.H.M. INLAY OPERATIONS FOR THE WESTBOUND MAIN LANES SHALL BE COMPLETED BEFORE MILL AND A.C.H.M. INLAY OPERATIONS CAN BEGIN ON THE EASTBOUND MAIN LANES. A TWO (2) MILE LANE CLOSURE WILL BE PERMITTED IN THE OPPOSITE MAIN LANES FOR CONSTRUCTION OTHER THAN MILL & INLAY OPERATIONS AS LONG AS NO OTHER LANE CLOSURE EXISTS IN THAT SET OF LANES.

FOR BRIDGE DECK REHABILITATION A SINGLE LANE CLOSURE OF NO MORE THAN TWO (2) MILES, WITH NO HOURLY RESTRICTIONS, WILL BE PERMITTED FOR A MAXIMUM OF TEN (10) CALENDAR DAYS TO COMPLETE EACH BRIDGE DECK. BRIDGE DECK REHABILITATION OPERATIONS MAY BEGIN WHEN MILL & INLAY OPERATIONS FOR A SET OF LANES HAS BEEN COMPLETED. ONLY ONE LANE CLOSURE PER SET OF MAIN LANES WILL BE ALLOWED AND SHALL NOT EXCEED THE ACTIVE WORK AREA BY MORE THAN ONE QUARTER (1/4) MILE. PRECAST CONCRETE BARRIER WALL WILL BE PROVIDED FOR BRIDGE DECK REHABILITATION AS SHOWN IN THE PLANS. REFER TO THE MAINTENANCE OF TRAFFIC SPECIAL PROVISION.

THE WESTBOUND MAIN LANE BRIDGES ARE TO BE COMPLETED BEFORE EASTBOUND MAIN LANE BRIDGE DECK REHABILITATION BEGINS. WHILE BRIDGE DECK OPERATIONS ARE UNDERWAY IN ONE DIRECTION, A TWO (2) MILE LANE CLOSURE WILL BE PERMITTED IN THE OPPOSITE MAIN LANES FOR CONSTRUCTION ACTIVITIES OTHER THAN BRIDGE DECK REHABILITATION, AS LONG AS NO OTHER LANE CLOSURE EXISTS IN THAT SET OF LANES. AS THE CONTRACTOR PROCEEDS WITH BRIDGE DECK REHABILITATION IN THE EASTBOUND LANES, BRIDGE DECK GROOVING WILL BE PERMITTED ON THE WESTBOUND LANES BRIDGES UTILIZING THE PERMITTED SINGLE TWO (2) MILE LANE CLOSURE.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

MAINTENANCE OF TRAFFIC ADVANCE SIGNS AT JOB ENDS

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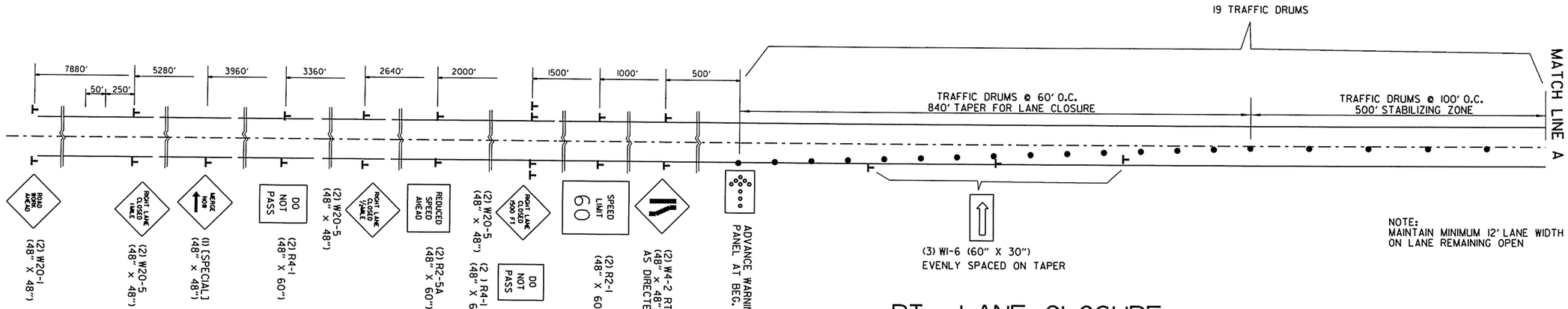
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	31	81

(2) MAINTENANCE OF TRAFFIC

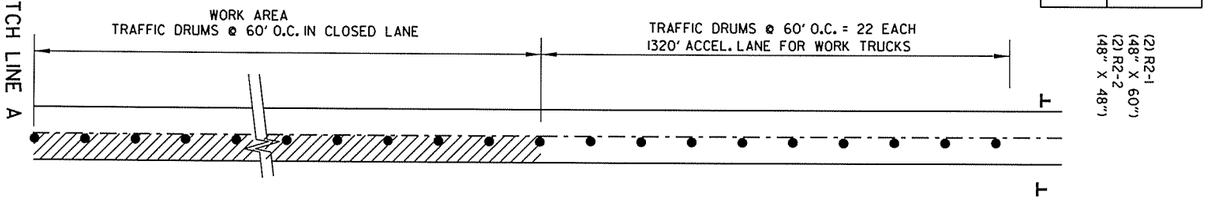
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



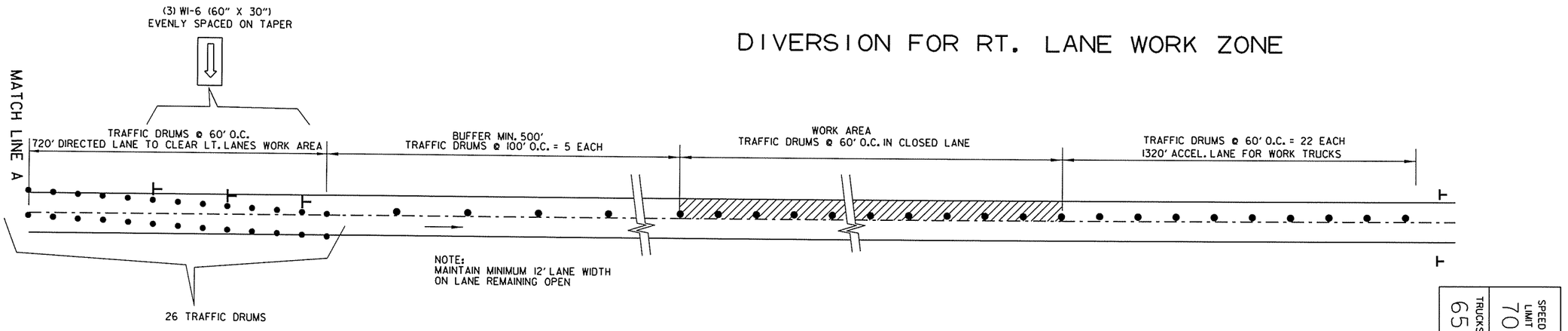
PORTABLE CHANGEABLE MESSAGE SIGN TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER

SPEED LIMIT SIGNS ARE ALSO PROVIDED FOR PLACEMENT PAST ENTRANCE RAMPS WITHIN THE WORK ZONE.

RT. LANE CLOSURE



DIVERSION FOR RT. LANE WORK ZONE



DIVERSION FOR LT. LANE WORK ZONE

MAINTENANCE OF TRAFFIC LANE CLOSURE

2/26/2014

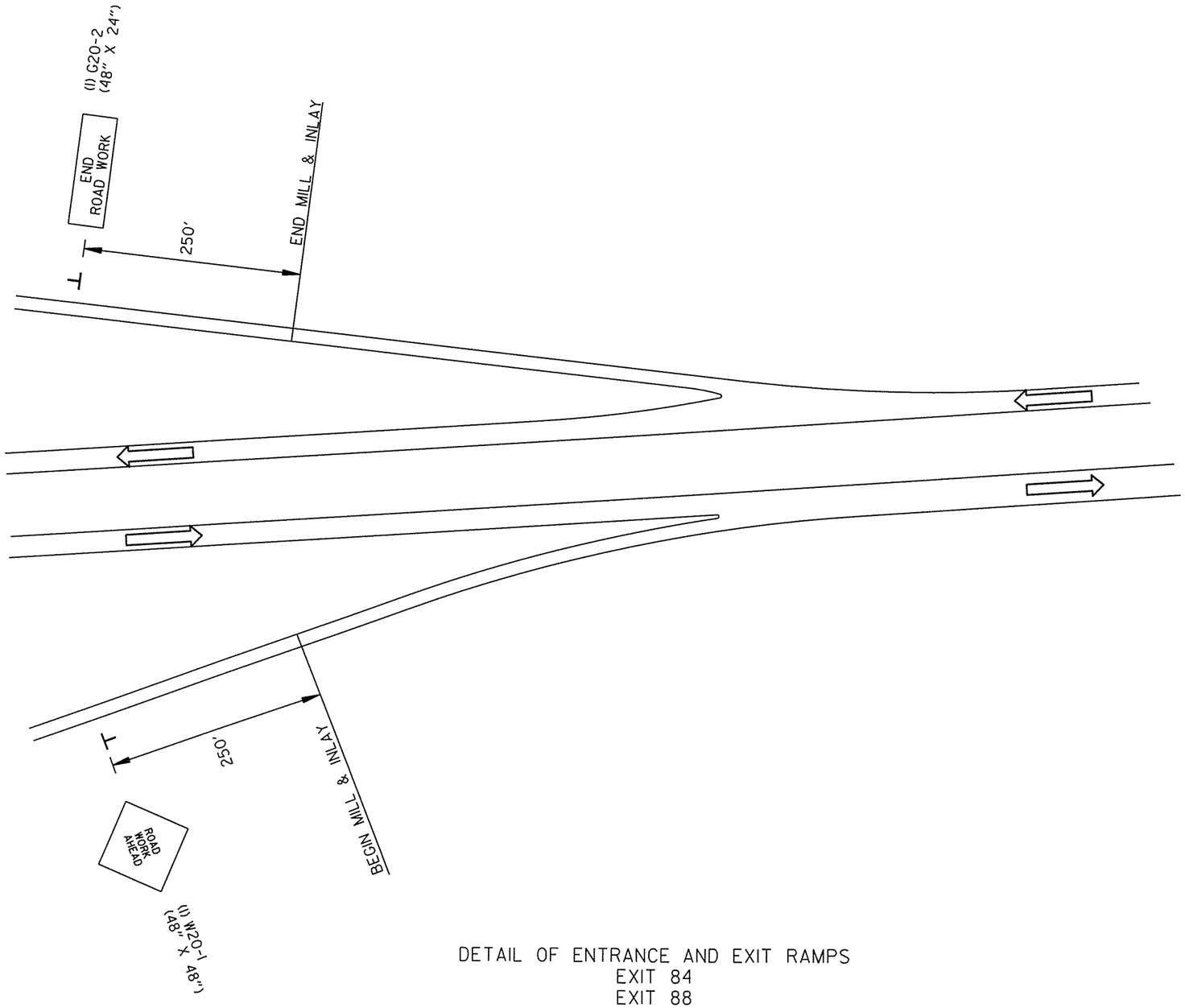
RBB0805.DGN

ADVANCE WARNING SIGNS FOR ENTRANCE AND EXIT RAMPS
ROAD WORK AHEAD (6) = 96 SQ. FT.
END ROAD WORK (6) = 48 SQ. FT.

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.		BB0805	32	81

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



DETAIL OF ENTRANCE AND EXIT RAMPS
EXIT 84
EXIT 88
EXIT 94

2/20/2014

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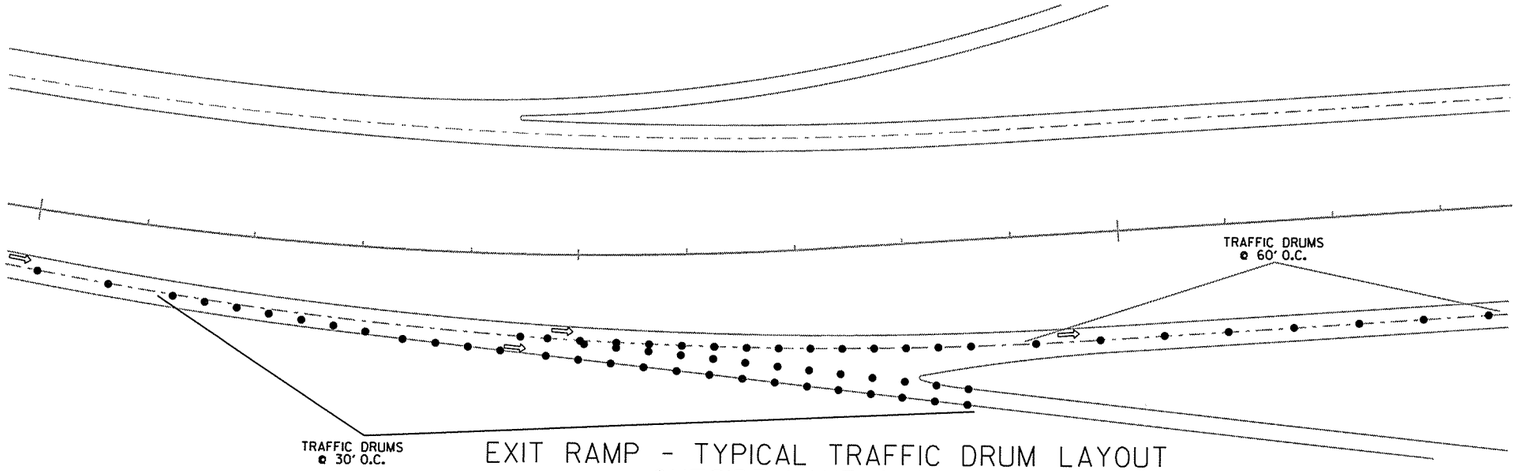
MAINTENANCE OF TRAFFIC
DETAIL OF RAMPS

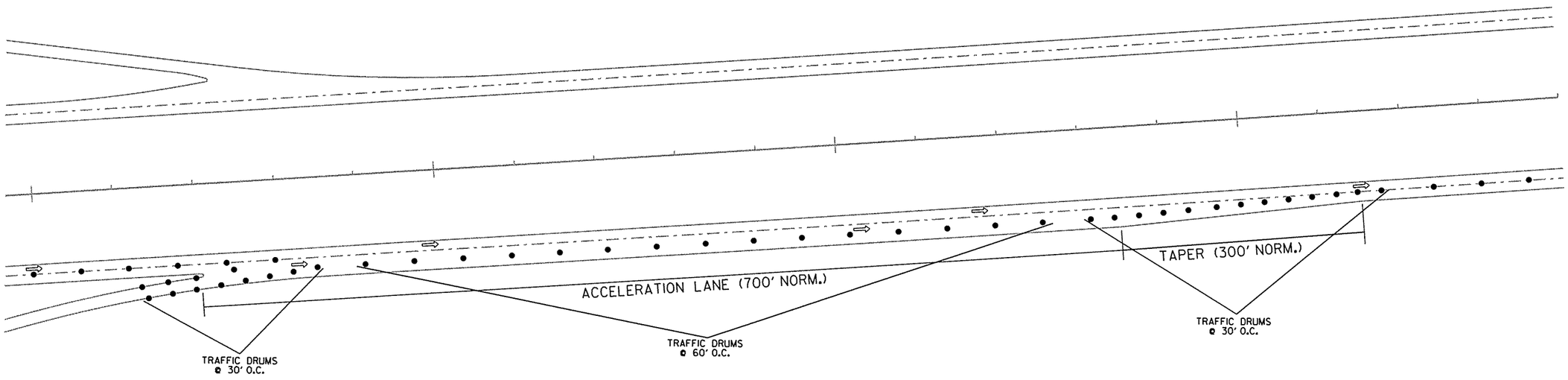
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BB0805	33	81

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



EXIT RAMP - TYPICAL TRAFFIC DRUM LAYOUT
OUTSIDE LANE CLOSURE



ENTRANCE RAMP - TYPICAL TRAFFIC DRUM LAYOUT
ACCELERATION LANE CLOSURE

EXIT 84:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
EASTBOUND ENTRANCE = 17 TRAFFIC DRUMS

WESTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 88:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
EASTBOUND ENTRANCE = 17 TRAFFIC DRUMS

WESTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

EXIT 94:
EASTBOUND EXIT = 40 TRAFFIC DRUMS
EASTBOUND ENTRANCE = 17 TRAFFIC DRUMS

WESTBOUND EXIT = 40 TRAFFIC DRUMS
WESTBOUND ENTRANCE = 17 TRAFFIC DRUMS

MAINTENANCE OF TRAFFIC
DETAIL OF RAMPS WITH LANE CLOSURE

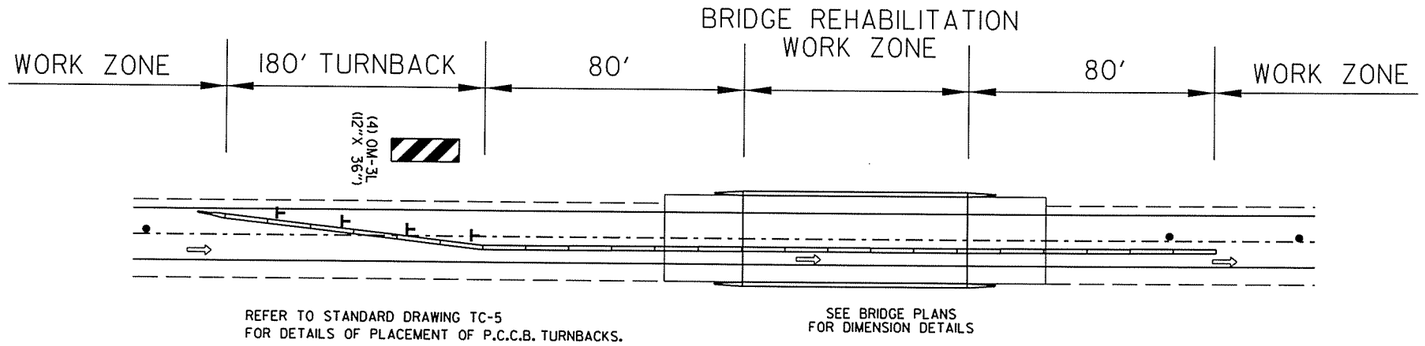
2/20/2014
RBB0805.DGN

PRECAST CONCRETE BARRIER WALL (2 LOCATIONS - 4 INSTALLATIONS)
(1) FURNISH AND INSTALL = 573 LIN. FT.
(3) RELOCATE = 573 LIN. FT. (PER INSTALLATION)

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.		BB0805	34	81

(2) MAINTENANCE OF TRAFFIC

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

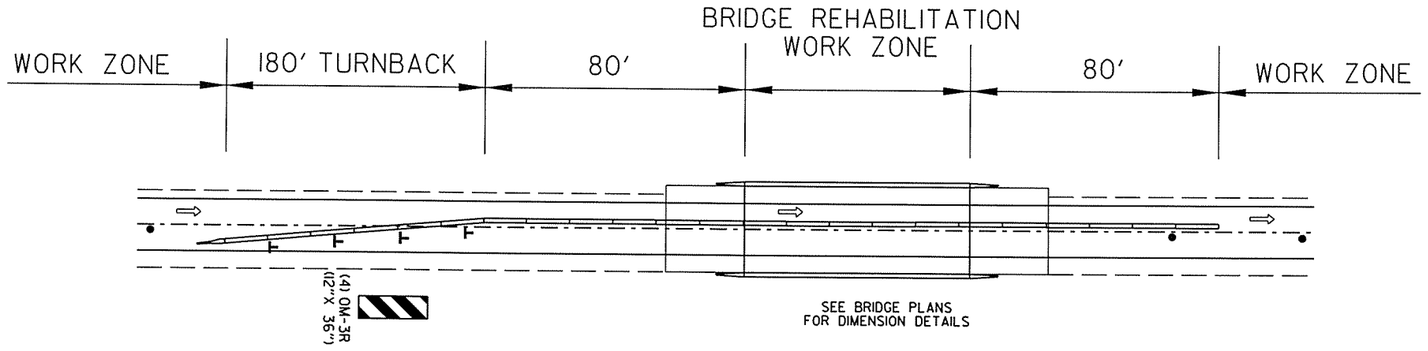


REFER TO STANDARD DRAWING TC-5
FOR DETAILS OF PLACEMENT OF P.C.C.B. TURNBACKS.

SEE BRIDGE PLANS
FOR DIMENSION DETAILS

DIVERSION FOR LT. LANE BRIDGE DECK REHABILITATION

1 SET OF THIS NEEDED FOR JOB BB0805.



REFER TO STANDARD DRAWING TC-5
FOR DETAILS OF PLACEMENT OF P.C.C.B. TURNBACKS.

SEE BRIDGE PLANS
FOR DIMENSION DETAILS

DIVERSION FOR RT. LANE BRIDGE DECK REHABILITATION

1 SET OF THIS NEEDED FOR JOB BB0805.

NOTE:
BRIDGE DECK REHABILITATION CAN BE PERFORMED FOLLOWING THE COMPLETION OF MAIN LANE MILL & INLAY OPERATIONS. REFER TO SHEET 31 FOR DETAIL OF TRAFFIC SHIFT USING TRAFFIC DRUMS. REFER TO SHEET 30 FOR SEQUENCE OF CONSTRUCTION DETAILS.

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MAINTENANCE OF TRAFFIC DETAILS
WORK ZONE - BRIDGE DECK REHABILITATION

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.		BB0805	35	81

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
3-5-14

CONSTRUCTION PAVEMENT MARKINGS AND PERMANENT PAVEMENT MARKINGS

DESCRIPTION	ENTIRE PROJECT	CONSTRUCTION PAVEMENT MARKINGS	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS	RAISED PAVEMENT MARKERS	HIGH PERFORMANCE CONTRAST PAVEMENT MARKING	HIGH PERFORMANCE PAVEMENT MARKING			
					4"	4"			8"
				TYPE II (WHITE/RED)	WHITE	(SKIP LINE) WHITE	WHITE	YELLOW	WHITE
	LIN. FT. - EACH	LIN. FT.	LIN. FT.	EACH	LIN. FT.	LIN. FT.			
CONSTRUCTION PAVEMENT MARKINGS	272504	272504							
REMOVABLE CONSTRUCTION PAV'T MARKINGS	3030		3030						
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED)	2169			2169					
HIGH PERFORMANCE CONTRAST PAVEMENT MARKING WHITE (4")	140				140				
HIGH PERFORMANCE PAVEMENT MARKING (SKIP LINE) WHITE (4")	28500					28500			
HIGH PERFORMANCE PAVEMENT MARKING WHITE (4")	118941						118941		
HIGH PERFORMANCE PAVEMENT MARKING YELLOW (4")	119625							119625	
HIGH PERFORMANCE PAVEMENT MARKING WHITE (8")	5298								5298
TOTALS:		**272504**	**3030**	**2169**	**140**	**28500**	**118941**	**119625**	**5298**

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2014 EDITION.

ADVANCE WARNING SIGNS AND DEVICES

SIGN NUMBER	DESCRIPTION	SIGN SIZE	ENTIRE PROJECT	MAXIMUM NUMBER REQUIRED	TOTAL SIGNS REQUIRED		TRAFFIC DRUMS	FURNISHING & INSTALLING PRECAST CONC. BARRIER	RELOCATING PRECAST CONCRETE BARRIER	ADVANCE WARNING ARROW PANEL	PORTABLE CHANGEABLE MESSAGE SIGN
			LIN. FT. - EACH		NO.	SQ. FT.	EACH	LIN. FT.		DAY	WEEK
W20-1	ROAD WORK 1500 FT.	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK 1/2 MILE	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK 1 MILE	48"x48"	4	4	4	64.0					
W20-1	ROAD WORK AHEAD	48"x48"	10	10	10	160.0					
G20-2	END ROAD WORK	48"x24"	10	10	10	80.0					
G20-1	ROAD WORK NEXT XX MILES	60"x24"	2	2	2	20.0					
W20-5	RIGHT LANE CLOSED 1 MILE	48"x48"	4	4	4	64.0					
W20-5	RIGHT LANE CLOSED 1/2 MILE	48"x48"	4	4	4	64.0					
W20-5	RIGHT LANE CLOSED 1500 FT.	48"x48"	4	4	4	64.0					
SPECIAL	MERGE NOW W/ ARROW	48"x48"	2	2	2	32.0					
R2-5A	REDUCED SPEED AHEAD	48"x60"	4	4	4	80.0					
R55-1	FINES DOUBLE IN WORK ZONES	36"x60"	4	4	4	60.0					
OM-3L	OBJECT MARKER	12"x36"	4	4	4	12.0					
OM-3R	OBJECT MARKER	12"x36"	4	4	4	12.0					
W1-6	LARGE ARROW	48"x24"	12	12	12	96.0					
R4-1	DO NOT PASS	48"x60"	8	8	8	160.0					
R2-1	SPEED LIMIT 60 MPH	48"x60"	6	6	6	120.0					
R2-1	SPEED LIMIT 70 MPH	48"x60"	4	4	4	80.0					
R2-2	TRUCKS SPEED LIMIT 65 MPH	48"x60"	4	4	4	80.0					
W4-2 RT.	MERGE RIGHT	48"x48"	4	4	4	64.0					
RSP-1	SHOULDER CLOSED	48"x30"	2	2	2	20.0					
	TRAFFIC DRUMS		786	786			786				
	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		573	573				573			
	RELOCATING PRECAST CONCRETE BARRIER		1719	1719					1719		
	ADVANCE WARNING ARROW PANEL		2	2						90	
	PORTABLE CHANGEABLE MESSAGE SIGN		6	6							66
TOTALS:						**1460.0**	**786**	**573**	**1719**	**90**	**66**

NOTE: THIS IS A HIGH TRAFFIC VOLUME ROAD AS DEFINED IN SECTION 604.03, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2014 EDITION.

NOTE: THE QUANTITY OF TRAFFIC DRUMS PROVIDED IS FOR BOTH SIDES OF THE ROADWAY FOR ONE WORK AREA OF TWO MILES AND ONE WORK AREA OF FOUR MILES.
HOWEVER, THE INSTALLATION OF TRAFFIC DRUMS SHALL NEVER EXCEED THE ACTUAL WORK AREA BY MORE THAN 1/4 MILE, UNLESS APPROVED BY THE ENGINEER.

2/27/2014

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				6	ARK.			
				JOB NO.		BB0805	36	81

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER

STATION	LOCATION	EACH
4609+47	GALLA PARK RD. OVERPASS	2
4674+55	PINE RIDGE RD. OVERPASS	2
TOTAL:		4

FLUSHING UNDERDRAIN

STA.	STA.	LOCATION	LIN. FT.
4430+00	4543+84	RIGHT MAIN LANES	11384
4545+65	4657+74	RIGHT MAIN LANES	11209
4660+44	5003+49	RIGHT MAIN LANES	34305
4430+00	4543+84	LEFT MAIN LANES	11384
4545+65	4657+49	LEFT MAIN LANES	11184
4660+18	5003+49	LEFT MAIN LANES	34331
TOTAL:			113797

GUARDRAIL

STATION	STATION	LOCATION	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE 2)	TERMINAL ANCHOR POST (TYPE 1)
			LIN. FT.	EACH	EACH
4605+71.59	4610+71.59	LEFT OF RIGHT MAIN LANES	450	1	1
4608+21.62	4613+21.62	RIGHT OF LEFT MAIN LANES	450	1	1
4670+80.32	4675+80.32	LEFT OF RIGHT MAIN LANES	450	1	1
4673+29.43	4678+29.43	RIGHT OF LEFT MAIN LANES	450	1	1
TOTALS:			1800	4	4

COLD MILLING ASPHALT PAVEMENT

STATION	STATION	LOCATION	AVG. WIDTH	COLD MILLING ASPHALT PAVEMENT
			FEET	SQ. YD.
		MAIN LANES		
4430+00.00	4543+84.15	I-40 RT. MAIN LANES	30	37947.17
4545+64.32	4657+74.50	I-40 RT. MAIN LANES	30	37367.27
4660+43.50	5003+48.78	I-40 RT. MAIN LANES	30	114350.93
4430+00.00	4543+84.15	I-40 LT. MAIN LANES	30	37947.17
4545+64.32	4657+48.50	I-40 LT. MAIN LANES	30	37280.60
4660+17.50	5003+48.78	I-40 LT. MAIN LANES	30	114437.60
		ADDITIONAL FOR ENTRANCE AND EXIT RAMPS		
4440+04.35	4446+67.28	EXIT 84 RT. MAIN LANES-TURN OUT	VARIES	966.20
4444+95.77	4450+45.77	EXIT 84 RAMP 1-EXIT RAMP	15.5	947.22
4467+90.95	4477+90.17	EXIT 84 RT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	759.70
4462+42.09	4467+92.09	EXIT 84 RAMP 2-ENTRANCE RAMP	15.5	947.22
4465+09.41	4471+60.90	EXIT 84 LT. MAIN LANES-TURN OUT	VARIES	607.55
4461+49.39	4466+99.39	EXIT 84 RAMP 3-EXIT RAMP	15.5	947.22
4434+24.16	4444+27.64	EXIT 84 LT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	1198.99
4444+26.23	4448+76.23	EXIT 84 RAMP 4-ENTRANCE RAMP	15.5	775.00
4664+54.40	4669+99.88	EXIT 88 RT. MAIN LANES-TURN OUT	VARIES	679.39
4668+32.24	4673+82.24	EXIT 88 RAMP 1-EXIT RAMP	15.5	947.22
4683+42.64	4693+38.85	EXIT 88 RT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	1083.83
4677+93.58	4683+43.58	EXIT 88 RAMP 2-ENTRANCE RAMP	15.5	947.22
4683+07.26	4688+36.89	EXIT 88 LT. MAIN LANES-TURN OUT	VARIES	634.86
4678+69.52	4684+19.52	EXIT 88 RAMP 3-EXIT RAMP	15.5	947.22
4667+78.19	4677+67.02	EXIT 88 LT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	1547.32
4677+65.76	4680+65.76	EXIT 88 RAMP 4-ENTRANCE RAMP	15.5	516.67
4973+13.50	4977+57.40	EXIT 94 RT. MAIN LANES- TURN OUT	VARIES	561.76
4977+56.75	4983+06.75	EXIT 94 RAMP 1-EXIT RAMP	15.5	947.22
4987+40.25	4997+42.36	EXIT 94 RT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	1333.20
4984+39.54	4987+39.54	EXIT 94 RAMP 2-ENTRANCE RAMP	15.5	516.67
4986+22.74	4989+89.41	EXIT 94 LT. MAIN LANES-TURN OUT	VARIES	347.01
4980+73.75	4986+23.75	EXIT 94 RAMP 3-EXIT RAMP	15.5	947.22
4967+66.50	4977+60.31	EXIT 94 LT. MAIN LANES-ACCELERATION LANE AND TAPER	VARIES	1203.04
4977+59.03	4983+09.03	EXIT 94 RAMP 4-ENTRANCE RAMP	15.5	947.22
TOTAL:				400586.91

NOTE: VARIABLE MILLING DEPTH. THE DEPTH OF MILLING SHALL BE AS DIRECTED BY THE ENGINEER.

SHOULDER RECONSTRUCTION FOR MAINTENANCE OF TRAFFIC

STATION	STATION	LOCATION	LENGTH	AVG. WIDTH	AREA	ACHM SURFACE COURSE (1/2")		ACHM BINDER COURSE (1")		TACK COAT 0.10 GAL PER SQ. YD.	TRENCHING AND SHOULDER PREPARATION
			LIN. FT.	FEET	SQ. YD.	LBS. PER SQ. YD.	TON	LBS. PER SQ. YD.	TON	GAL.	STATION
4655+08.84	4657+48.84	LT. OF LT. MAIN LANES	240.00	10	266.7	440	58.7	660	88.0	26.67	2.40
4660+25.01	4662+65.01	LT. OF LT. MAIN LANES	240.00	10	266.7	440	58.7	660	88.0	26.67	2.40
4655+34.81	4657+74.81	RT. OF RT. MAIN LANES	240.00	10	266.7	440	58.7	660	88.0	26.67	2.40
4660+49.51	4662+89.51	RT. OF RT. MAIN LANES	240.00	10	266.7	440	58.7	660	88.0	26.67	2.40
TOTALS:							234.8		352.0	106.68	9.60

BASIS OF ESTIMATE:
ACHM BINDER COURSE (1") MIN AGG = 95.5% ASPH BINDER (PG 76-22) = 4.5%
ACHM SURFACE COURSE (1/2") MIN AGG = 94.6% ASPH BINDER (PG 76-22) = 5.4%
NMAX = 205

12/23/2013

RBB0805.DGN

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.		BB0805	37	81

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

CONCRETE DITCH PAVING

STATION	STATION	LOCATION	LENGTH	"W"	CONC. DITCH PAVING (TYPE B)	SOLID SODDING	WATER
			LIN. FT.	FEET	SQ. YD.	SQ. YD.	M. GAL.
4457+00	4541+46	LEFT OF RIGHT MAIN LANES	8446.00	4	3753.78	3753.78	47.30
4545+38	4555+00	LEFT OF RIGHT MAIN LANES	962.00	4	427.56	427.56	5.39
4591+65	4608+12	RIGHT OF LEFT MAIN LANES	1647.00	4	732.00	732.00	9.22
4613+32	4657+82	RIGHT OF LEFT MAIN LANES	4450.00	4	1977.78	1977.78	24.92
4662+61	4673+20	RIGHT OF LEFT MAIN LANES	1059.00	4	470.67	470.67	5.93
4675+89	4750+05	LEFT OF RIGHT MAIN LANES	7416.00	4	3296.00	3296.00	41.53
4924+25	4974+34	RIGHT OF LEFT MAIN LANES	5009.00	4	2226.22	2226.22	28.05
TOTALS:					12884.01	12884.01	162.34

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	**WRSF POST REPAIR
			LIN. FT	EACH	LUMP SUM	EACH
4456+40.00	4541+46.00	LEFT OF RIGHT MAIN LANES	8506.00	2		
4545+38.00	4555+00.00	LEFT OF RIGHT MAIN LANES	962.00	2		
4591+65.00	4608+72.00	RIGHT OF LEFT MAIN LANES	1707.00	2		
4612+72.00	4657+82.00	RIGHT OF LEFT MAIN LANES	4510.00	2		
4662+61.00	4673+80.00	RIGHT OF LEFT MAIN LANES	1119.00	2		
4675+29.00	4750+05.00	LEFT OF RIGHT MAIN LANES	7476.00	2		
4924+25.00	4974+93.00	RIGHT OF LEFT MAIN LANES	5068.00	2		
ENTIRE	PROJECT				1.00	50
TOTALS:			29348.00	14	1.00	50

* SHOWN FOR INFORMATION ONLY.
** QUANTITY ESTIMATED
SEE SECTION 104.03 OF THE STD. SPECS.

EROSION CONTROL

STATION	STATION	LOCATION	PERMANENT EROSION CONTROL					TEMPORARY EROSION CONTROL		
			SEEDING	LIME	MULCH COVER	WATER	SECOND SEEDING APPLICATION	SAND BAG DITCH CHECKS (E-5)	DROP INLET SILT FENCE (E-7)	*SEDIMENT REMOVAL & DISPOSAL
			ACRE	TON	ACRE	M.GAL.	ACRE	BAG	LIN. FT.	CU. YD.
ENTIRE	PROJECT	MAIN LANES	6.91	13.82	6.91	704.8	6.91	726	775	62
*ENTIRE PROJECT TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.			1.73	3.46	1.73	176.5	1.73	182	194	7
TOTALS:			8.64	17.28	8.64	881.3	8.64	908	969	69

BASIS OF ESTIMATE:
LIME .....2 TONS / ACRE OF SEEDING
WATER.....102.0 M.G. / ACRE OF SEEDING.
SAND BAG DITCH CHECKS.....22 BAGS / LOCATION
DROP INLET SILT FENCE.....25 LIN. FT./LOCATION

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 ARE ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.

EARTHWORK

STATION	STATION	LOCATION / DESCRIPTION	UNCLASSIFIED EXCAVATION	COMPACTED EMBANKMENT
			CU. YD.	
4456+15	4457+46	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT HWY. 331 OVERPASS	26	
4605+29	4611+15	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT GALLA PARK RD. OVERPASS	116	
4607+65	4613+81	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT GALLA PARK RD. OVERPASS	122	
4670+38	4676+39	LT. OF RT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT PINE RIDGE RD. OVERPASS	119	
4672+73	4678+74	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT PINE RIDGE RD. OVERPASS	119	
4973+87	4975+18	RT. OF LT. MAIN LANES SHLDR. WIDENING FOR GUARDRAIL AT N. CHURCH ST. OVERPASS	26	
* ENTIRE	PROJECT	TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER		100*
TOTALS:			528	100

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.
COMPACTION WILL BE AT THE SATISFACTION OF THE ENGINEER.
NOTE: EARTHWORK QUANTITIES SHOWN ABOVE SHALL BE PAID AS PLAN QUANTITY.

RUMBLE STRIPS IN ASPHALT SHOULDERS

STATION	STATION	LOCATION	* RUMBLE STRIPS IN ASPHALT SHOULDERS
			LIN.FT.
4430+00	4444+95	RT. OF RT. MAIN LANES	1495
4446+67	4467+91	RT. OF RT. MAIN LANES	2124
4467+93	4543+84	RT. OF RT. MAIN LANES	7591
4545+64	4657+80	RT. OF RT. MAIN LANES	11216
4660+48	4668+31	RT. OF RT. MAIN LANES	783
4670+19	4683+43	RT. OF RT. MAIN LANES	1324
4683+44	4977+56	RT. OF RT. MAIN LANES	29412
4977+22	4987+39	RT. OF RT. MAIN LANES	1017
4987+40	5003+49	RT. OF RT. MAIN LANES	1609
4430+00	4444+25	LT. OF LT. MAIN LANES	1425
4444+27	4465+78	LT. OF LT. MAIN LANES	2151
4467+00	4543+84	LT. OF LT. MAIN LANES	7684
4545+64	4657+43	LT. OF LT. MAIN LANES	11179
4660+15	4677+65	LT. OF LT. MAIN LANES	1750
4677+67	4683+08	LT. OF LT. MAIN LANES	541
4684+22	4977+58	LT. OF LT. MAIN LANES	29336
4977+60	4986+57	LT. OF LT. MAIN LANES	897
4986+25	5003+49	LT. OF LT. MAIN LANES	1724
4430+00	4543+84	LT. OF RT. MAIN LANES	11384
4545+64	4657+70	LT. OF RT. MAIN LANES	11206
4660+40	5003+49	LT. OF RT. MAIN LANES	34309
4430+00	4543+84	RT. OF LT. MAIN LANES	11384
4545+64	4657+52	RT. OF LT. MAIN LANES	11188
4660+22	5003+49	RT. OF LT. MAIN LANES	34327
TOTAL:			227056

* QUANTITY ESTIMATED.
SEE SECTION 104.03 OF THE STD. SPECS.
TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

12/23/2013

RBB0805.DGN

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.		BB0805	38	81

(2) QUANTITIES

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

BASE AND SURFACING

STATION	STATION	LOCATION	LENGTH	AGGREGATE BASE COURSE (CLASS 7)		TACK COAT				ACHM SURFACE COURSE (1/2")			
				TON / STATION	TON	AVG. WID.	SQ.YD.	GALLONS / SQ.YD.	GALLON	AVG. WID.	SQ.YD.	POUND / SQ.YD.	PG 76-22
			FEET			FEET				FEET			TON
MAIN LANES													
4430+00.00	4543+84.15	I-40 RT. MAIN LANES	11384.15			30.0	37947.17	0.10	3794.7	30.0	37947.17	220.0	4174.2
4545+64.32	4657+74.50	I-40 RT. MAIN LANES	11210.18			30.0	37367.27	0.10	3736.7	30.0	37367.27	220.0	4110.4
4660+43.50	5003+48.78	I-40 RT. MAIN LANES	34305.28			30.0	114350.93	0.10	11435.1	30.0	114350.93	220.0	12578.6
4430+00.00	4543+84.15	I-40 LT. MAIN LANES	11384.15			30.0	37947.17	0.10	3794.7	30.0	37947.17	220.0	4174.2
4545+64.32	4657+48.50	I-40 LT. MAIN LANES	11184.18			30.0	37280.60	0.10	3728.1	30.0	37280.60	220.0	4100.9
4660+17.50	5003+48.78	I-40 LT. MAIN LANES	34331.28			30.0	114437.60	0.10	11443.8	30.0	114437.60	220.0	12588.1
ADDITIONAL FOR ENTRANCE AND EXIT RAMPS													
4440+04.35	4446+67.28	EXIT 84 RT. MAIN LANES-TURN OUT	662.93			VARIES	966.20	0.10	96.6	VARIES	966.20	220.0	106.3
4444+95.77	4450+45.77	EXIT 84 RAMP 1-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4467+90.95	4477+90.17	EXIT 84 RT. MAIN LANES-ACCELERATION LANE AND TAPER	999.22			VARIES	759.70	0.10	76.0	VARIES	759.70	220.0	83.6
4462+42.09	4467+92.09	EXIT 84 RAMP 2-ENTRANCE RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4465+09.41	4471+60.90	EXIT 84 LT. MAIN LANES-TURN OUT	651.49			VARIES	607.55	0.10	60.8	VARIES	607.55	220.0	66.8
4461+49.39	4466+99.39	EXIT 84 RAMP 3-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4434+24.16	4444+27.64	EXIT 84 LT. MAIN LANES-ACCELERATION LANE AND TAPER	1003.48			VARIES	1198.99	0.10	119.9	VARIES	1198.99	220.0	131.9
4444+26.23	4448+76.23	EXIT 84 RAMP 4-ENTRANCE RAMP	450.00			15.5	775.00	0.10	77.5	15.5	775.00	220.0	85.3
4664+54.40	4669+99.88	EXIT 88 RT. MAIN LANES-TURN OUT	545.48			VARIES	679.39	0.10	67.9	VARIES	679.39	220.0	74.7
4668+32.24	4673+82.24	EXIT 88 RAMP 1-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4683+42.64	4693+38.85	EXIT 88 RT. MAIN LANES-ACCELERATION LANE AND TAPER	996.21			VARIES	1083.83	0.10	108.4	VARIES	1083.83	220.0	119.2
4677+93.58	4683+43.58	EXIT 88 RAMP 2-ENTRANCE RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4683+07.26	4688+36.89	EXIT 88 LT. MAIN LANES-TURN OUT	529.63			VARIES	634.86	0.10	63.5	VARIES	634.86	220.0	69.8
4678+69.52	4684+19.52	EXIT 88 RAMP 3-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4667+78.19	4677+67.02	EXIT 88 LT. MAIN LANES-ACCELERATION LANE AND TAPER	988.83			VARIES	1547.32	0.10	154.7	VARIES	1547.32	220.0	170.2
4677+65.76	4680+65.76	EXIT 88 RAMP 4-ENTRANCE RAMP	300.00			15.5	516.67	0.10	51.7	15.5	516.67	220.0	56.8
4973+13.50	4977+57.40	EXIT 94 RT. MAIN LANES- TURN OUT	443.90			VARIES	561.76	0.10	56.2	VARIES	561.76	220.0	61.8
4977+56.75	4983+06.75	EXIT 94 RAMP 1-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4987+40.25	4997+42.36	EXIT 94 RT. MAIN LANES-ACCELERATION LANE AND TAPER	1002.11			VARIES	1333.20	0.10	133.3	VARIES	1333.20	220.0	146.7
4984+39.54	4987+39.54	EXIT 94 RAMP 2-ENTRANCE RAMP	300.00			15.5	516.67	0.10	51.7	15.5	516.67	220.0	56.8
4986+22.74	4989+89.41	EXIT 94 LT. MAIN LANES-TURN OUT	366.67			VARIES	347.01	0.10	34.7	VARIES	347.01	220.0	38.2
4980+73.75	4986+23.75	EXIT 94 RAMP 3-EXIT RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
4967+66.50	4977+60.31	EXIT 94 LT. MAIN LANES-ACCELERATION LANE AND TAPER	993.81			VARIES	1203.04	0.10	120.3	VARIES	1203.04	220.0	132.3
4977+59.03	4983+09.03	EXIT 94 RAMP 4-ENTRANCE RAMP	550.00			15.5	947.22	0.10	94.7	15.5	947.22	220.0	104.2
ADDITIONAL FOR WIDENING FOR GUARDRAIL													
4456+14.79	4457+45.79	LEFT OF RIGHT MAIN LANES	131.00	4.25	5.6					VARIES	36.10	220.0	4.0
4605+29.03	4611+15.03	LEFT OF RIGHT MAIN LANES	586.00	28.75	168.5					VARIES	468.16	220.0	51.5
4607+65.07	4613+81.07	RIGHT OF LEFT MAIN LANES	616.00	30.25	186.3					VARIES	540.39	220.0	59.4
4670+38.16	4676+39.16	LEFT OF RIGHT MAIN LANES	601.00	29.50	177.3					VARIES	504.28	220.0	55.5
4672+72.65	4678+73.65	RIGHT OF LEFT MAIN LANES	601.00	29.50	177.3					VARIES	504.28	220.0	55.5
4973+86.66	4975+17.66	RIGHT OF LEFT MAIN LANES	131.00	4.25	5.6					VARIES	36.10	220.0	4.0
TOTALS:					**720.6**		**400586.91**		**40058.6**		**402676.22**		**44294.5**

BASIS OF ESTIMATE:
ACHM SURFACE COURSE (1/2").....94.6% MIN. AGGR.....5.4% ASPHALT BINDER
MAXIMUM NUMBER OF GYRATIONS = 205 FOR PG 76-22

12/23/2013

RBB0805.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4/9/14				6	ARK.			
				JOB NO.		BB0805	39	81
				(1) A3969,B3969 - QUANTITIES - 53015				

SCHEDULE OF BRIDGE QUANTITIES - JOB BB0805

LOG MILE	UNIT OF STRUCTURE	ITEM NO.	509	802	803	803	804	SP JOB BB0805	SP JOB BB0805	SP JOB BB0805
		ITEM	JOINT REHABILITATION (TYPE A)	GROOVING	CLASS 1 PROTECTIVE SURFACE TREATMENT	CLASS 3 PROTECTIVE SURFACE TREATMENT	REINFORCING STEEL - BRIDGE (GRADE 60)	LATEX MODIFIED CONCRETE OVERLAY (1½" THICK)	△1 LATEX MODIFIED CONCRETE (VARIABLE DEPTH)	HYDRODEMOLITION
		UNIT	LIN. FT.	SQ. YD.	GAL.	LIN. FT.	LBS.	SQ. YD.	CU. YD.	SQ. YD.
87.89	EXISTING BRIDGE NO. A3969 (Site 1A)		252	784	17	396	500	852	12	850
87.89	EXISTING BRIDGE NO. B3969 (Site 1B)		252	784	17	396	500	852	12	850
TOTALS FOR JOB NO. BB0805			504	1,568	34	792	1,000 (1)	1,704	24 (1)	1,700

(1) This quantity shown is for estimating and bidding purposes only. Actual quantity, if any, will be determined in the field.

△1 Removed Pay Item, 4/9/14 CMW

STEWART LINZ
DESIGN SECTION SUPERVISOR

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 7510
4/9/14
CARL J. FUSELIER

BRIDGE ENGINEER

SCHEDULE OF BRIDGE QUANTITIES
HWY. 331 - ATKINS (S)
POPE COUNTY

ROUTE 40 SEC. 22

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: CSL DATE: 9/10/13 FILENAME: bbb0805_qt.dgn
CHECKED BY: CMW DATE: 1/3/14 SCALE: NO SCALE
DESIGNED BY: — DATE: —

BRIDGE NO. A3969, B3969 DRAWING NO. 53015

PRINT DATE: 08-APR-2014

ZBORDER.CEL 3/24/2014

SUMMARY OF QUANTITIES

ITEM NUMBER	ITEM	9050	BIM-B40-0(224)	QUANTITY	UNIT
210	UNCLASSIFIED EXCAVATION	528		528	CU. YD.
210	COMPACTED EMBANKMENT	100		100	CU. YD.
SP & 215	TRENCHING AND SHOULDER PREPARATION		10	10	STATION
303	AGGREGATE BASE COURSE (CLASS 7)		721	721	TON
401	TACK COAT		40165	40165	GAL.
SP, SS, & 406	MINERAL AGGREGATE IN ACHM BINDER COURSE (1")		336	336	TON
SP, SS, & 406	ASPHALT BINDER (PG 76-22) IN ACHM BINDER COURSE (1")		16	16	TON
SP, SS, & 407	MINERAL AGGREGATE IN ACHM SURFACE COURSE (1/2")		42124	42124	TON
SP, SS, & 407	ASPHALT BINDER (PG 76-22) IN ACHM SURFACE COURSE (1/2")		2405	2405	TON
412	COLD MILLING ASPHALT PAVEMENT		400587	400587	SQ. YD.
601	MOBILIZATION		1.00	1.00	LUMP SUM
SP & 603	MAINTENANCE OF TRAFFIC		1.00	1.00	LUMP SUM
604	SIGNS		1460	1460	SQ. FT.
604	TRAFFIC DRUMS		786	786	EACH
604	FURNISHING AND INSTALLING PRECAST CONCRETE BARRIER		573	573	LIN. FT.
604	RELOCATING PRECAST CONCRETE BARRIER		1719	1719	LIN. FT.
604	CONSTRUCTION PAVEMENT MARKINGS		272504	272504	LIN. FT.
604	REMOVABLE CONSTRUCTION PAVEMENT MARKINGS		3030	3030	LIN. FT.
604	ADVANCE WARNING ARROW PANEL		90	90	DAY
SP & 604	PORTABLE CHANGEABLE MESSAGE SIGN		66	66	WEEK
SP & 605	CONCRETE DITCH PAVING (TYPE B)	12884		12884	SQ. YD.
617	GUARDRAIL (TYPE A)	1800		1800	LIN. FT.
617	GUARDRAIL TERMINAL (TYPE 2)	4		4	EACH
617	TERMINAL ANCHOR POSTS (TYPE 1)	4		4	EACH
620	LIME	17		17	TON
620	SEEDING	8.64		8.64	ACRE
SS & 620	MULCH COVER	8.64		8.64	ACRE
620	WATER	1043.6		1043.6	M.GAL.
621	SAND BAG DITCH CHECKS		908	908	BAG
621	DROP INLET SILT FENCE		969	969	LIN. FT.
621	SEDIMENT REMOVAL AND DISPOSAL		69	69	CU. YD.
623	SECOND SEEDING APPLICATION		8.64	8.64	ACRE
624	SOLID SODDING	12884		12884	SQ. YD.
635	ROADWAY CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
642	RUMBLE STRIPS IN ASPHALT SHOULDERS		227056	227056	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING (SKIP LINE) WHITE (4") (ALTERNATE NO. 1)		28500	28500	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE (SKIP LINE) WHITE (4") (ALTERNATE NO. 2)		28500	28500	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 1)		118941	118941	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (4") (ALTERNATE NO. 2)		118941	118941	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC CONTRAST PAVEMENT MARKING WHITE (4") (ALTERNATE NO. 1)		140	140	LIN. FT.
* SP	HIGH PERFORMANCE CONTRAST MARKING TAPE WHITE (4") (ALTERNATE NO. 2)		140	140	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING WHITE (8") (ALTERNATE NO. 1)		5298	5298	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE WHITE (8") (ALTERNATE NO. 2)		5298	5298	LIN. FT.
* SP & 719	INVERTED PROFILE THERMOPLASTIC PAVEMENT MARKING YELLOW (4") (ALTERNATE NO. 1)		119625	119625	LIN. FT.
* SP	HIGH PERFORMANCE MARKING TAPE YELLOW (4") (ALTERNATE NO. 2)		119625	119625	LIN. FT.
721	RAISED PAVEMENT MARKERS (TYPE II)		2169	2169	EACH
SP	FLUSHING UNDERDRAIN		113797	113797	LIN. FT.
SP	REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER	4		4	EACH
SP	WIRE ROPE SAFETY FENCE (POST REPAIR)	50		50	EACH
SP	WIRE ROPE SAFETY FENCE	29348		29348	LIN. FT.
SP	WIRE ROPE SAFETY FENCE MAINTENANCE MATERIALS	1.00		1.00	LUMP SUM
	STRUCTURES OVER 20' SPAN				
509	JOINT REHABILITATION (TYPE A)		504	504	LIN. FT.
636	BRIDGE CONSTRUCTION CONTROL		1.00	1.00	LUMP SUM
802	GROOVING		1568	1568	SQ. YD.
803	CLASS 1 PROTECTIVE SURFACE TREATMENT		34	34	GAL.
803	CLASS 3 PROTECTIVE SURFACE TREATMENT		792	792	LIN. FT.
804	REINFORCING STEEL - BRIDGE (GRADE 60)		1000	1000	LBS.
SP	HYDRODEMOLITION		1700	1700	SQ. YD.
SP	LATEX MODIFIED CONCRETE OVERLAY (1 1/2" THICK)		1704	1704	SQ. YD.

* DENOTES ALTERNATE BID ITEMS

REVISIONS

DATE	REVISION	SHEET NUMBER
3/24/2014	ADDED THREADED TERMINAL DETAIL TO SHEET 6	6, 40
4/9/2014	REMOVED PAY ITEM "LATEX MODIFIED CONCRETE (VARIABLE DEPTH)"	39, 40, 81

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11435 LARRY D. SMITH
4-10-14

SUMMARY OF QUANTITIES AND REVISIONS

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED
3-24-14			
4-9-14			

FED.RD. DIST.NO.	STATE	FED.AID PROJ.NO.	SHEET NO.	TOTAL SHEETS
6	ARK.		40	81

JOB NO. BB0805

(2) SUMMARY OF QUANTITIES AND 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.		BB0805	41	81

(2) PLAN SHEETS

STA. 4440+00 IN PLACE
24" R.C. PIPE CULVERT
UNDER LT. LANE
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0" OPENING
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4430+00.00
BEG. JOB BB0805
BEG. MILL & INLAY
END JOB BB0804
LOG MILE 83.6

EXIST. R/W & C. OF A.

4430 4435 S 50°56'03" E 4440 4445

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

24" R.C.P.
RETAIN

4445 4450 S 50°56'03" E 4455 4460

24" R.C.P.
RETAIN

HWY. 33
BR. NO. 06666

STA. 4454+88
END WRSF JOB BB0804

24" R.C.P.
RETAIN

STA. 4456+40
BEG. WRSF

STA. 4459+00 IN PLACE
24" R.C. PIPE CULVERT
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0"
RETAIN

STA. 4447+00 IN PLACE
24" R.C. PIPE CULVERT
UNDER LT. LANE
W/TYPE "H" DROP INLET IN MEDIAN
4' - 0" x 4' - 0" 2 - OPENINGS
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	42	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
2-27-14
TRINITY D. SMITH

A.

24" R.C.P.
RETAIN

PC 4465+16.82

EXIST. R/W & C. OF A.

4460 — S 50°56'03" E — 4465 — 4470 — 4475

WRSF AND CONCRETE
DITCH PAVING

PI 4471+95.83

EXIST. R/W & C. OF A.

EXIST.

STA. 4480+00 IN PLACE
DBL. 8' x 5' R.C. BOX CULVERT
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0" 2 - OPENINGS
RETAIN

EXIST. R/W

EXIST. C. OF A.

EXIST. R/W

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

PT 4478+72.87

4475 — 4480 — S 58°30'03" E — 4485 — 4490

WRSF AND CONCRETE
DITCH PAVING

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

STA. 4489+00 IN PLACE
24" R.C. PIPE CULVERT
UNDER RT. LANE
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0"
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	43	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4499+00 IN PLACE
24" R.C. PIPE CULVERT
UNDER RT. LANE
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0"
RETAIN

EXIST. R/W & C. OF A.

4490 4495 S 58°30'03" E 4500 4505

WRSF AND CONCRETE DITCH PAVING

EXIST. R/W & C. OF A.

STA. 4506+05 IN PLACE
24" x 150' R.C. PIPE CULVERT
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0" x 2' - 10"
RETAIN

EXIST. R/W & C. OF A.

4505 S 58°30'03" E 4510 4515 4520

WRSF AND CONCRETE DITCH PAVING

PC 4512+41.66

PC 4512+80.08

PC 4513+49.15

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

STA. 4519+00 IN PLACE
DBL. 5' x 3' x 179' R.C. BOX CULVERT
RETAIN

STA. 4517+00 IN PLACE
24" x 86' R.C. PIPE CULVERT
UNDER RT. LANE
W/TYPE "H" DROP INLET IN MED.
4' - 0" x 4' - 0" x 2' - 10"
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	44	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4521+38 IN PLACE
24" x 90' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

PI 4526+77.46

STA. 4529+00 IN PLACE
36" x 66' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4529+00 IN PLACE
36" x 64' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

Dbl. 36" R.C.P.
RETAIN

EXIST. R/W

EXIST. R/W & C. OF A.

EXIST. C. OF A.

4520 4525 4530 4535

WRSF AND CONCRETE DITCH PAVING

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

FURNITURE RD.

EXIST. C. OF A.

EXIST. C. OF A.

STA. 4542+30 IN PLACE
42" x 252' R.C. PIPE CULVERT
RETAIN

STA. 4544+51IN PLACE
24" x 200' R.C. PIPE CULVERT
RETAIN

BR. END STA. 4544+20.65

OLD COVE RD

STA. 4544+99 IN PLACE
24" x 200' R.C. PIPE CULVERT
RETAIN

EXIST. R/W & C. OF A.

BR. END STA. 4545+27.82

BR. NO. A3967

4535 4540 4545 4550

S 31°23'03" E

BR. NO. B3967

PT 4539+77.48

PT 4540+22.47

PT 4540+35.80

STA. 4541+46
END WRSF

BR. END STA. 4544+20.65

STA. 4545+38
BEG. WRSF
BR. END STA. 4545+27.82

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

NOTE: BRIDGE NO. A3967 & B3967 ARE EXCEPTIONS TO JOB BB0805

STA. 4537+14 IN PLACE
5' x 4' x 244' R.C. BOX CULVERT
W/TYPE "K" DROP INLET IN MED.
4' - 0" x 4' - 0" x 2' - 8" 2-OPENINGS
15° RT. FWD. SKEW

2/20/2014

RBB0805.DGN

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.		BB0805	45	81

(2) PLAN SHEETS

STA. 4549+00 IN PLACE
5' x 3' x 244' R.C. BOX CULVERT
W/TYPE "H" DROP INLET IN MED.
4'-0" x 4'-0" x 0'-10" 2-OPENINGS
RETAIN

STA. 4553+18 IN PLACE
36" X 76' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4553+18 IN PLACE
36" X 94' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4558+60 IN PLACE
36" X 78' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4558+60 IN PLACE
36" X 78' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4561+54 IN PLACE
30" X 84' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4561+54 IN PLACE
30" X 72' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
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TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

PC 4555+57.03

4550 4555 4560 4565

S 31°23'03" E

STA. 4555+00
END WRSF
LOG MILE 86.00

EXIST. R/W & C. OF A.

EXIST. C. OF A.

STA. 4565+90 IN PLACE
42" X 74' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4565+90 IN PLACE
42" X 122' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

4565 4570 4575 4580

ST. R/W & C. OF A.

EXIST. R/W & C. OF A.

STA. 4571+75 IN PLACE
30" X 94' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4571+75 IN PLACE
30" X 72' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

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RBB0805.DGN

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.		BB0805	46	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
1-27-14
TRINITY D. SMITH

STA. 4580+45 IN PLACE
48" X 78' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4580+45 IN PLACE
48" X 100' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4585+24 IN PLACE
30" X 116' R.C. PIPE CULVERT
UNDER LT. LANE
(30° RT. FWD. SKEW)
RETAIN

STA. 4585+24 IN PLACE
30" X 148' R.C. PIPE CULVERT
UNDER RT. LANE
(30° RT. FWD. SKEW)
RETAIN

EXIST. R/W

EXIST. C. OF A.

EXIST. R/W

EXIST. C. OF A.

4580

S 67°23'03" E

4585

4590

4595

PT 4581+10.23

PC 4587+40.31

PC 4588+60.88

PC 4589+68.65

PI 4593+04.21

STA. 4591+65
BEGIN WRSF
LOG MILE 86.70

EXIST. R/W & C. OF A.

STA. 4595+00 IN PLACE
24" X 68' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4604+00 IN PLACE
24" X 82' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

EXIST. R/W

BEAR MT. LN.

24" R.C.P.
RETAIN

EXIST. C. OF A.

EXIST. C. OF A.

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 4609+47 C.L. OF I-40 = 2 EACH

STA. 4608+72
END WRSF

GALLA PARK RD.

EXIST. R/W

24" R.C.P.
RETAIN

4595

4600

S 58°40'03" E

4605

4610

PT 4595+05.11

PT 4597+45.83

PT 4598+47.44

24" R.C.P.
RETAIN

BR. NO. 03968

EXIST. R/W & C. OF A.

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
4605+71.59	4610+71.59	R.M.L. - LT.	450 LIN. FT.	1EA.	1EA.
4608+21.62	4613+21.62	L.M.L. - RT.	450 LIN. FT.	1EA.	1EA.

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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.			
				JOB NO.		BB0805	47	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W

STA. 4611+00 IN PLACE
24" X 84' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

STA. 4618+00 IN PLACE
24" X 82' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

EXIST. R/W & C. OF A.

EXIST. R/W

4610 4615 S 58°40'03" E 4620 4625

STA. 4612+72
BEG. WRSF

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

STA. 4627+00 IN PLACE
24" X 84' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

/W & C. OF A.

EXIST. R/W & C. OF A.

WRSF AND CONCRETE
DITCH PAVING

4625 4630 S 58°40'03" E 4635 4640

STA. 4635+00 IN PLACE
18" X 128' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-4"
RETAIN

EXIST. R/W & C. OF A.

2/20/2014

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				6	ARK.			
				JOB NO.		BB0805	48	81

(2) PLAN SHEETS

STA. 4646+00 IN PLACE
24" X 100' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 6'-10"
RETAIN

STA. 4653+00 IN PLACE
18" X 114' R.C. PIPE OUTLET
UNDER LT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-4"
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

N

EXIST. R/W & C. OF A.

WRSF AND CONCRETE DITCH PAVING

PC 4647+88.99

4640 S 58°40'03" E 4645 4650 4655

EXIST. R/W & C. OF A.

EXIST. R/W &

EXIST. R/W & C. OF A.

EXIST. R/W

EXIST. C. OF A.

Gaia Creek

EXIST. C. OF A.

EXIST. R/W & C. OF A.

BR. END STA. 4657+85.00

BR. END STA. 4659+81.00

STA. 4663+00 IN PLACE
24" X 100' R.C. PIPE OUTLET
UNDER RT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 6'-6"
RETAIN

BR. NO. A3969

4655 4660 4665 4670

BR. NO. B3969

STA. 4657+82
END WRSF
BR. END STA. 4658+11.00

STA. 4662+61
BEG. WRSF

BR. END STA. 4660+07.00

RAMP L

EXIST. C. OF A.

EXIST. C. OF A.

EXIST. R/W

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

N

STA. 4657+85.00 BR. END
EXISTING 196.00' BRIDGE NO. A3969
39'-0" CLEAR ROADWAY
STA. 4659+81.00 BR. END
REHABILITATE BRIDGE DECK-
HYDRODEMOLITION

STA. 4658+11.00 BR. END
EXISTING 196.00' BRIDGE NO. B3969
39'-0" CLEAR ROADWAY
STA. 4660+07.00 BR. END
REHABILITATE BRIDGE DECK-
HYDRODEMOLITION

2/20/2014

RBB0805.DGN

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				6	ARK.			
				JOB NO.		BB0805	49	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH

EXIST. R/W & C. OF A.

STA. 4670+00 IN PLACE
24" X 88' R.C. PIPE OUTLET
UNDER RT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 6'-6" WITH
TYPE H DROP INLET ON RT.
4'-0" X 4'-0" X 2'-10"
RETAIN

REMOVAL AND DISPOSAL OF IMPACT ATTENUATION BARRIER
STA. 4674+55 C.L. OF I-40 = 2 EACH

PINE RIDGE RD.

BR. NO. 03970

STA. 4676+00 IN PLACE
24" X 176' R.C. PIPE CULVERT
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

RAMP 4

STA. 4681+28 IN PLACE
6' X 4' X 230' R.C. BOX CULVERT WITH
TYPE K DROP INLET IN MEDIAN
4'-0" X 4'-0" X 0'-10"
RETAIN

RAMP 3

4670

4675

4680

4685

RAMP 1

STA. 4673+80
END WRSF

STA. 4675+29
BEG. WRSF

STA.	STA.	SIDE	GUARDRAIL (TYPE A)	GUARDRAIL TERMINAL (TYPE I)	GUARDRAIL TERMINAL (TYPE 2)
4670+80.32	4675+80.32	R.M.L. - LT.	450 LIN. FT.	IEA.	IEA.
4673+29.43	4678+29.43	L.M.L. - RT.	450 LIN. FT.	IEA.	IEA.

RAMP 2

EXIST. R/W

EXIST. R/W

EXIST. R/W

MOUNTIAN BASE RD.

EXIST. C. OF A.

EXIST. C. OF A.

4685

4690

4695

4700

WRSF AND CONCRETE
DITCH PAVING

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

STA. 4687+56 IN PLACE
6' X 6' X 326' R.C. BOX CULVERT WITH
TYPE K DROP INLET IN MEDIAN
4'-0" X 4'-0" X 0'-10" &
TYPE K DROP INLET 88' LT.
4'-0" X 4'-0" X0'-10"
RETAIN

STA. 4695+00 IN PLACE
24" X 92' R.C. PIPE OUTLET
UNDER RT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	50	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
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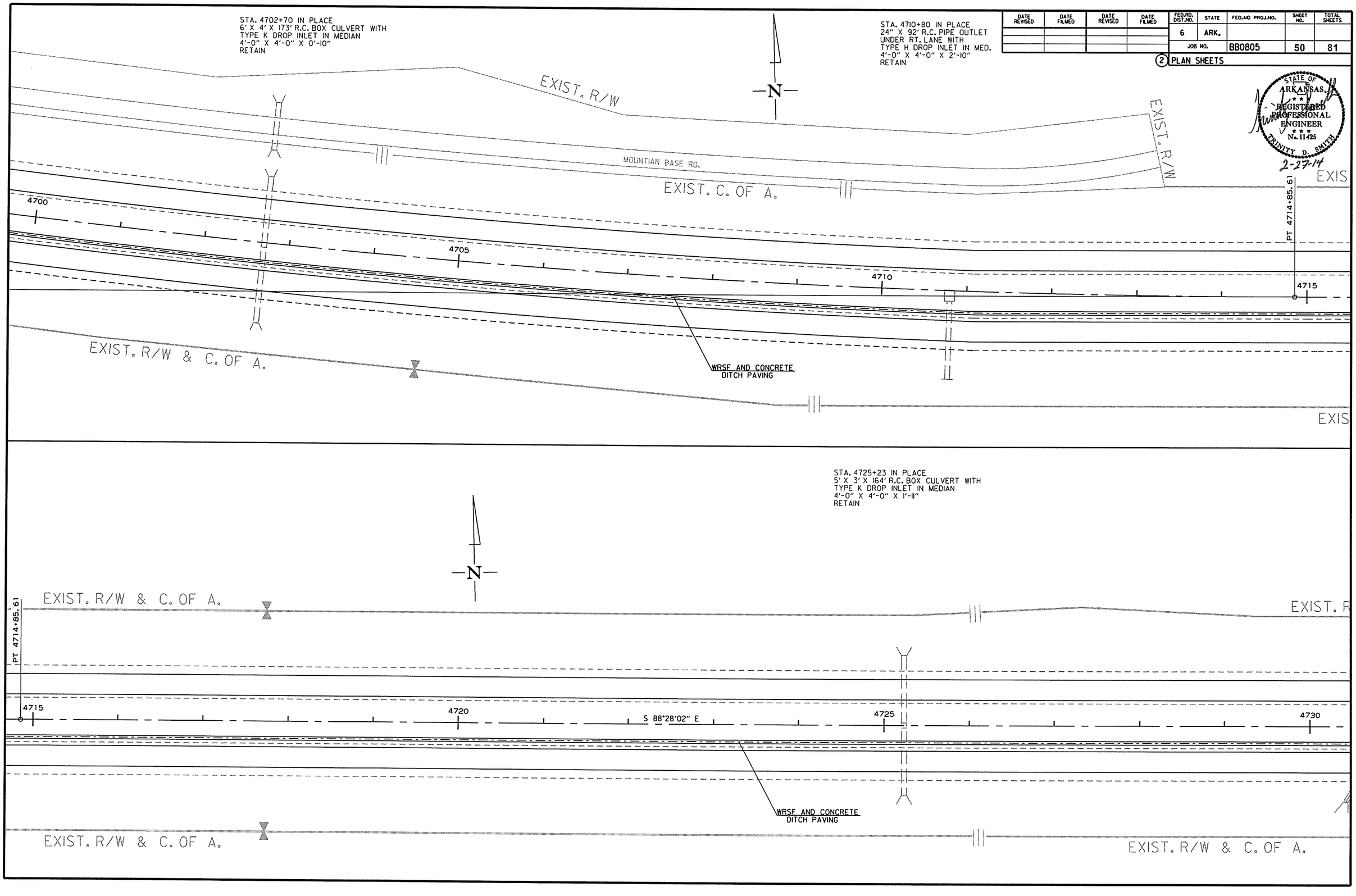
STA. 4702+70 IN PLACE
6' X 4' X 173' R.C. BOX CULVERT WITH
TYPE K DROP INLET IN MEDIAN
4'-0" X 4'-0" X 0'-10"
RETAIN

STA. 4710+80 IN PLACE
24" X 92' R.C. PIPE OUTLET
UNDER RT. LANE WITH
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN



2/20/2014

RBB0805.DGN

STA. 4730+93 IN PLACE
DBL. 5' X 5' X 198' R.C. BOX CULVERT WITH
TYPE K DROP INLET IN MEDIAN
4'-0" X 4'-0" X 1'-11"
30° LT FWD. SKEW
RETAIN

STA. 4739+35 IN PLACE
DBL. 24" X 158' R.C. PIPE CULVERT
TYPE H DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

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.		BB0805	51	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

4730 4735 S 88°28'02" E 4740 4745

WRSF AND CONCRETE DITCH PAVING

PC 4743+05.59

PC 4745+01.13

EXIST. R/W & C. OF A.

PC 4745+01.13

4745 4750 4755 4760

PI 4752+31.38

STA. 4750+05
END WRSF
LOG MILE 89.70

PT 4759+53.36

EXIST. R/W & C. OF A.

STA. 4745+33 IN PLACE
36" X 58' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4745+53 IN PLACE
36" X 60' R.C. PIPE CULVERT
UNDER RT. LANE WITH
RETAIN

STA. 4749+32 IN PLACE
6' X 6' X 184' R.C. BOX CULVERT WITH
TYPE K DROP INLET IN MEDIAN
4'-0" X 4'-0" X 0'-10"
RETAIN

STA. 4756+73 IN PLACE
24" X 64' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	52	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4764+70 IN PLACE
30" X 82' R.C. PIPE CULVERT
UNDER LT. LANE
30° RT. FWD. SKEW
RETAIN

STA. 4765+00 IN PLACE
30" X 80' R.C. PIPE CULVERT
UNDER RT. LANE
30° RT. FWD. SKEW
RETAIN

EXIST. R/W & C. OF A.

STA. 4773+70 IN PLACE
6' X 6' X 88' R.C. BOX CULVERT
UNDER LT. LANE
15°RT. FWD. SKEW
RETAIN

N

4760 | 4765 | S 76°00'00" E | 4770 | 4775

PT 476+49.87

EXIST. R/W &

STA. 4774+03 IN PLACE
6' X 6' X 83' R.C. BOX CULVERT
UNDER RT. LANE
15°RT. FWD. SKEW
RETAIN

STA. 4784+00 IN PLACE
30" X 68' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4779+23 IN PLACE
30" X 66' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

N

PC 4780+83.68

STA. 4789+13 IN PLACE
48" X 70' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

4775 | S 76°00'00" E | 4780 | 4785 | 4790

IST. R/W & C. OF A.

STA. 4779+23 IN PLACE
30" X 64' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4784+00 IN PLACE
30" X 68' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4789+12 IN PLACE
48" X 70' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

2/20/2014

RBB0805.DGN

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				6	ARK.			
				JOB NO.		BB0805	53	81

(2) PLAN SHEETS

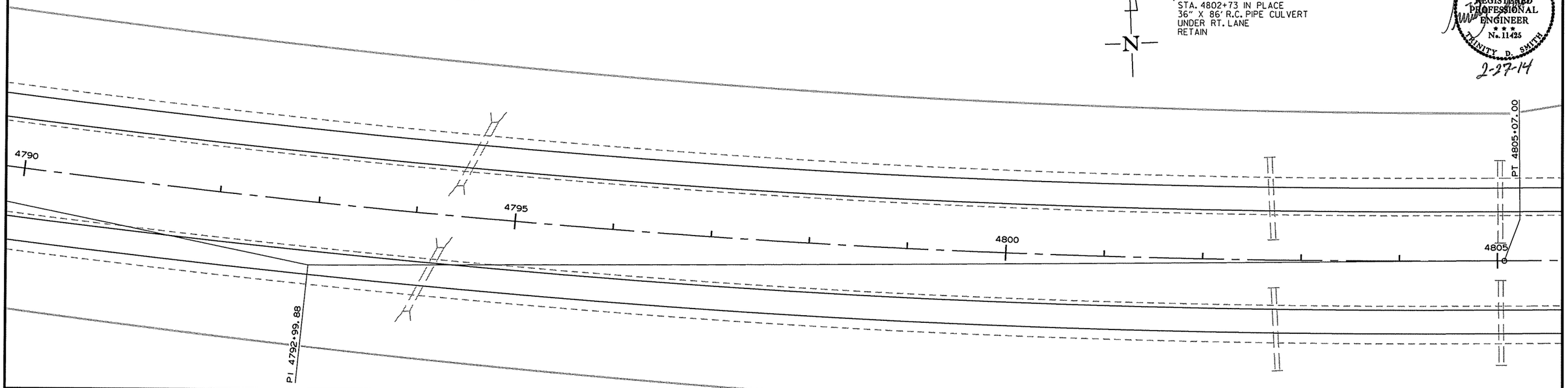
STA. 4794+50 IN PLACE
6' X 5' X 76' R.C. BOX CULVERT
UNDER LT. LANE
30°RT. FWD. SKEW
RETAIN

STA. 4794+21IN PLACE
6' X 5' X 76' R.C. BOX CULVERT
UNDER RT. LANE
30°RT. FWD. SKEW
RETAIN

STA. 4802+72 IN PLACE
36" X 76' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4802+73 IN PLACE
36" X 86' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14



STA. 4805+03 IN PLACE
36" X 84' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

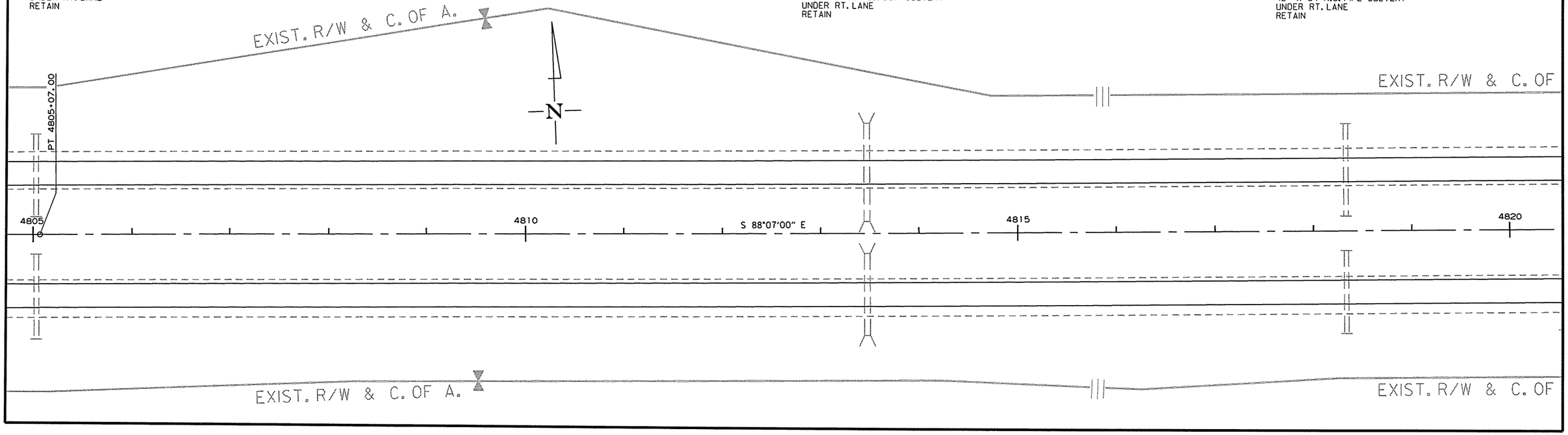
STA. 4805+03 IN PLACE
36" X 110' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4813+48 IN PLACE
5' X 5' X 100' R.C. BOX CULVERT
UNDER LT. LANE
RETAIN

STA. 4813+47 IN PLACE
5' X 5' X 83' R.C. BOX CULVERT
UNDER RT. LANE
RETAIN

STA. 4818+34 IN PLACE
42" X 94' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4818+34 IN PLACE
42" X 84' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN



2/20/2014

RBB0805.DGN

STA. 4820+85 IN PLACE
48" X 88' R.C. PIPE CULVERT
UNDER RT. LANE
30° LT. FWD. SKEW
RETAIN

STA. 4821+30 IN PLACE
48" X 102' R.C. PIPE CULVERT
UNDER LT. LANE
30° LT. FWD. SKEW
RETAIN

STA. 4831+44 IN PLACE
5' X 4' X 240' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 0'-11"
RETAIN

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.		BB0805	54	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

C. OF A.

N

4820 4825 S 88°07'00" E 4830 4835

C. OF A.

EXIST. R/W & C. OF A.

STA. 4838+73 IN PLACE
5' X 5' X 257' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 0'-11"
RETAIN

EXIST. R/W & C. OF A.

4835 4840 S 88°07'00" E 4845 4850

N

EXIST. R/W & C. OF A.

STA. 4843+00 IN PLACE
24" X 80' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

2/20/2014

RBB0805.DGN

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.		BB0805	55	81
				(2) PLAN SHEETS				

STA. 4856+23 IN PLACE
5' X 4' X 241' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 0'-11"
RETAIN

STA. 4860+00 IN PLACE
30" X 312' R.C. PIPE CULVERT
WITH TYPE N DROP INLET IN MED.
30° LT. FWD. SKEW
RETAIN

EXIST. R/W & C. OF A.

N

4850 4855 S 88°07'00" E 4860 4865

EXIST. R/W & C. OF A.

STA. 4867+93 IN PLACE
36" X 64' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4867+93 IN PLACE
36" X 64' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STA. 4876+49 IN PLACE
5' X 4' X 70' R.C. BOX CULVERT
UNDER LT. LANE
RETAIN

STA. 4876+49 IN PLACE
5' X 4' X 79' R.C. BOX CULVERT
UNDER RT. LANE
RETAIN

EXIST. R/W & C. OF A.

N

4865 4870 S 88°07'00" E 4875 4880

EXIST. R/W & C. OF A.

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

2/20/2014

RBB0805.DGN

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.		BB0805	56	81

(2) PLAN SHEETS

STA. 4884+33 IN PLACE
30" X 226' R.C. PIPE CULVERT
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

STA. 4886+93 IN PLACE
5' X 4' X 238' R.C. BOX CULVERT
RETAIN

STA. 4892+39 IN PLACE
42" X 84' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4892+39 IN PLACE
42" X 120' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

EXIST. R/W & C

N

4880 4885 S 88°07'00" E 4890 4895

STA. 4895+38 IN PLACE
30" X 84' R.C. PIPE CULVERT
UNDER LT. LANE
30° LT. FWD. SKEW
RETAIN

STA. 4899+83 IN PLACE
5' X 4' X 70' R.C. BOX CULVERT
UNDER LT. LANE
RETAIN

STA. 4909+68 IN PLACE
5' X 4' X 94' R.C. BOX CULVERT
UNDER LT. LANE
30° LT. FWD. SKEW
RETAIN

R/W & C. OF A.

EXIST. R/W & C. OF A.

PC 4904+19.92
PC 4904+26.83
PC 4904+34.08

N

4895 S 88°07'00" E 4900 4905 4910

STA. 4894+80 IN PLACE
30" X 116' R.C. PIPE CULVERT
UNDER RT. LANE
30° LT. FWD. SKEW
RETAIN

STA. 4909+01 IN PLACE
5' X 4' X 144' R.C. BOX CULVERT
UNDER RT. LANE
30° LT FWD. SKEW
RETAIN

/W & C. OF A.

STA. 4899+83 IN PLACE
5' X 4' X 79' R.C. BOX CULVERT
UNDER RT. LANE
RETAIN

EXIST. R/W & C. OF A.

2/20/2014

RBB0805.DGN

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.		BB0805	57	81

(2) PLAN SHEETS

STA. 4917+38 IN PLACE
4' X 4' X 84' R.C. BOX CULVERT
UNDER LT. LANE
30° RT. FWD. SKEW
RETAIN

STA. 4918+06 IN PLACE
4' X 4' X 115' R.C. BOX CULVERT
UNDER RT. LANE
30° RT FWD. SKEW
RETAIN

STA. 4919+81 IN PLACE
4' X 4' X 247' R.C. BOX CULVERT
UNDER LT. LANE
30° LT. FWD. SKEW
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W & C. OF A.

4910 4915 4920 4925

STA. 4924+25
BEG. WRSF

EXIST. R/W & C. OF A.

STA. 4930+23 IN PLACE
48" X 78' R.C. PIPE CULVERT
UNDER LT. LANE
RETAIN

STA. 4930+23 IN PLACE
48" X 96' R.C. PIPE CULVERT
UNDER RT. LANE
RETAIN

EXIST. R/W & C. OF A.

EXIST. R/W
UTILITY SERVICE LANE

EXIST. C. OF A.

WRSF AND CONCRETE DITCH PAVING

4925 4930 4935 4940

EXIST. R/W & C. OF A.

EXIST. R/W

2/20/2014

RBB0805.DGN

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.		BB0805	58	81
				(2) PLAN SHEETS				

STA. 4940+54 IN PLACE
4' X 5' X 240' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 2'-7"
30° LT. FWD. SKEW
RETAIN

STA. 4952+76 IN PLACE
5' X 4' X 245' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 6'-11"
30° RT. FWD. SKEW
RETAIN

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

EXIST. R/W
UTILITY SERVICE LANE
EXIST. C. OF A.
EXIST. C. OF A.
EXIST. C. OF
WRSF AND CONCRETE DITCH PAVING
PT 4945+55.18
PT 4945+61.73
PT 4945+68.93
4940
4945
4950
4955
N 50°32'04" E
R/W & C. OF A.
EXIST. R/W & C. OF A.
EXIST. R/W & C. OF

EXIST. R/W
UTILITY SERVICE LANE
ST. C. OF A.
EXIST. C. OF A.
WRSF AND CONCRETE DITCH PAVING
4955
4960
4965
4970
PC 4955+97.19
R/W & C. OF A.
EXIST. R/W & C. OF A.

STA. 4960+30 IN PLACE
6' X 3' X 186' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 0'-10"
30° LT. FWD. SKEW
RETAIN

STA. 4967+96 IN PLACE
24" X 82' R.C. PIPE CULVERT
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

RBB0805.DGN 2/20/2014

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.		BB0805	59	81
				(2) PLAN SHEETS				

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4973+93 IN PLACE
24" X 84' R.C. PIPE CULVERT
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

PI 4974+55.62

42" R.C.P.
RETAIN

Dbl. 6' x4'
R.C.B.
RETAIN

48" R.C.P.
RETAIN

EXIST. R/W

EXIST. R/W & C. OF A.

STA. 4974+93
END WRSF
JOB BB0805

BR. NO. 03978

STA. 4976+30
BEGIN WRSF
JOB BB0806

RAMP 4

RAMP 3

EXIST. R/W & C. OF A.

24" R.C.P.
RETAIN

4970

4975

4980

4985

RAMP 1

24" R.C.P.
RETAIN

HWY. 105

STA. 4979+06 IN PLACE
DBL. 6' X 4' X 234' R.C. BOX CULVERT
WITH TYPE K DROP INLET IN MED.
4'-0" X 4'-0" X 1'-0"
30° RT. FWD. SKEW
RETAIN

RAMP 2

Dbl. 6' x4'
R.C.B.
RETAIN

EXIST. R/

EXIST. R/W

24" R.C.P.
RETAIN

RAMP 3

RAMP 4

N

2/20/2014

RBB0805.DGN

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.		BB0805	60	81

(2) PLAN SHEETS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11425
TRINITY D. SMITH
2-27-14

STA. 4986+87 IN PLACE
24" X 90' R.C. PIPE CULVERT
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-10"
RETAIN

STA. 4993+85 IN PLACE
24" X 92' R.C. PIPE CULVERT
UNDER RT. LANE
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-0"
RETAIN

STA. 4995+86 IN PLACE
5' X 4' X 174' R.C. BOX CULVERT
RETAIN

EXIST. R/W

EXIST. C. OF A.

EXIST. C. OF A. EXIST. C. OF A.

4985 4990 4995 S 80°52'00" E 5000

PT 4990+88.49

EXIST. R/W & C. OF A.

EXIST. R/W & C. OF A.

EXIST. R/W

EXIST. C. OF A.

EXIST. R/W & C. OF A.

EXIST. R/W

5000 5005 S 80°52'00" E 5010 5015

STA. 5003+48.78
END JOB BB0805
END MILL & INLAY
LOG MILE 94.5
BEGIN JOB BB0806

EXIST. R/W & C. OF A.

EXIST. R/W & C.

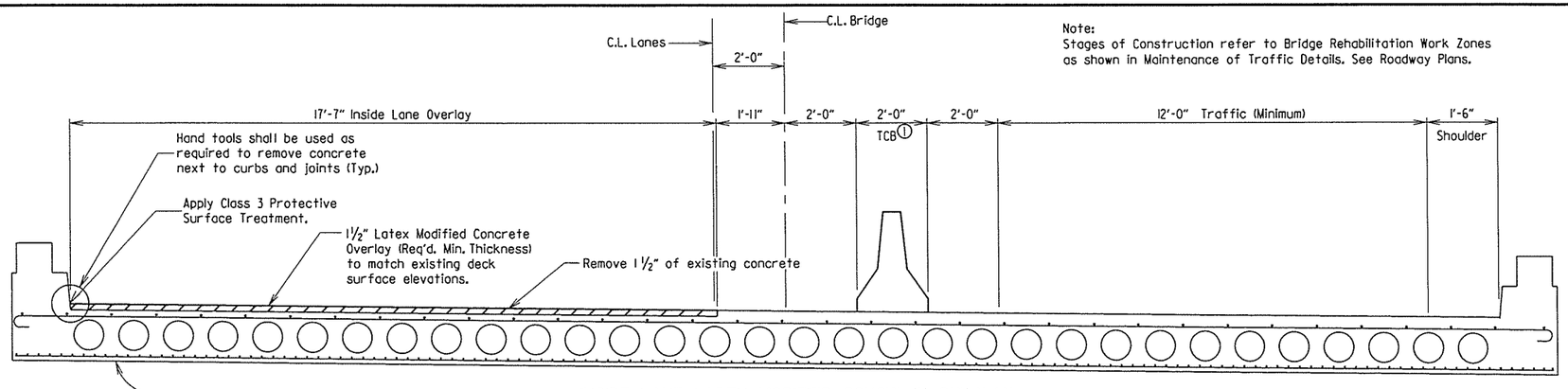
STA. 5001+86 IN PLACE
24" X 86' R.C. PIPE CULVERT
UNDER LT. LANE
WITH TYPE N DROP INLET IN MED.
4'-0" X 4'-0" X 2'-0"
RETAIN

2/20/2014

RBB0805.DGN

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4/9/14				6	ARK.			
				JOB NO.		BB0805	61	81

(1) A3969,B3969 - LMC OVERLAY - 53016

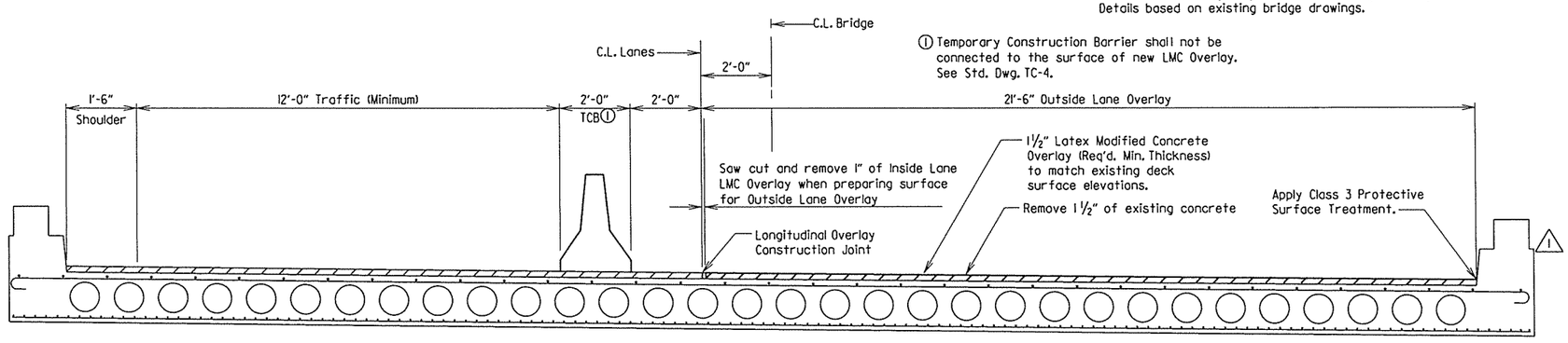


INSIDE LANE LATEX MODIFIED CONCRETE OVERLAY

(Looking in direction of traffic)

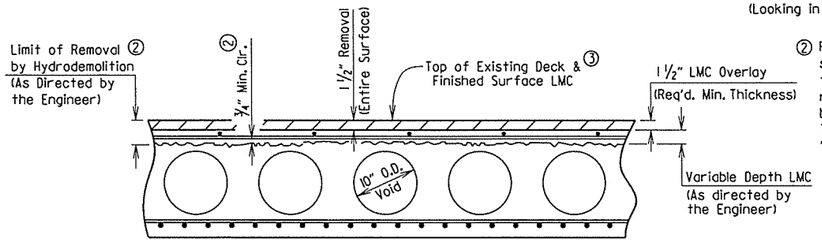
Note:
Stages of Construction refer to Bridge Rehabilitation Work Zones as shown in Maintenance of Traffic Details. See Roadway Plans.

NOTE:
The minimum overlay length shall be from joint to joint. Details based on existing bridge drawings.



OUTSIDE LANE LATEX MODIFIED CONCRETE OVERLAY

(Looking in direction of traffic)

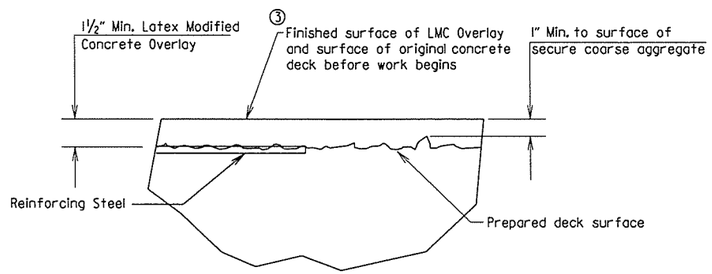


② Removal of unsound concrete beyond 1½" below the original surface shall be at the direction of the Engineer. If the bond between existing concrete and the top mat of reinforcing steel is destroyed, then the concrete shall be removed to a minimum of ¾" clearance around the bar. This removal shall be subsidiary to the item SP Job BB0805 "Hydrodemolition."

③ Finished surface of LMC overlay shall match existing concrete deck surface unless increase is required to maintain minimum required LMC Overlay thickness.

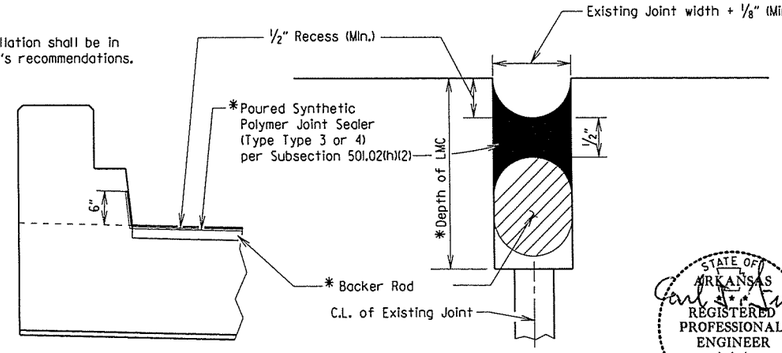
If the hydrodemolition equipment blows through the deck or into a deck void, that area shall be the responsibility of the Contractor and shall be repaired at the Contractor's expense. The Contractor shall provide a method of handling unexpected blow through of the deck or into a deck void.

DETAILS OF HYDRODEMOLITION AND LATEX MODIFIED CONCRETE OVERLAY



LMC OVERLAY TOLERANCE

* Depth of joint and joint installation shall be in accordance with manufacturer's recommendations.



Saw, cut or router ends of slab to achieve joint width as shown. Sawing beyond the face of curb is not required. See Section 509 for additional information & payment.

DETAILS OF TYPE A JOINT REHABILITATION

GENERAL NOTES:

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 2014, with applicable special provisions and Supplemental Specifications. Unless otherwise noted in the plans Section and Subsection refer to the Standard Specifications.

Drawing shows details and dimensions of existing structures based on the original bridge plans. The Contractor shall make check measurements in the field and make any adjustments necessary to meet the required clearances and fit the new work to the existing structure.

The operation or placement of equipment and, or materials on the subject bridges necessary for the completion of this work shall be subject to the provisions of Subsection 105.14. Certifications of the adequacy of all components for the anticipated loads shall address the capacity of the existing structure at all phases of this work.

HYDRODEMOLITION: The designated area of the existing bridge deck shall receive hydrodemolition in accordance with the Special Provision Job BB0805 "Hydrodemolition" to a planned depth of 1½" below the existing bridge deck surface. Deteriorated concrete below this depth shall be removed up to the limits detailed and at the direction of the Engineer. These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item Special Provision Job BB0805 "Hydrodemolition." Prior to hydrodemolition, cold milling of any asphalt for its full depth and the concrete deck to a maximum depth of 1" will be allowed unless there will be a conflict with the existing reinforcing.

LATEX MODIFIED CONCRETE OVERLAY: The designated area of the existing bridge deck shall receive a Latex Modified Concrete (LMC) Overlay to a planned depth of 1½" below the existing bridge deck surface, in accordance with the Special Provision Job BB0805 "Latex Modified Concrete Overlay". These areas shall be measured by the square yard and shall be paid for at the unit price bid for the item SP Job BB0614 "Latex Modified Concrete Overlay (1½" Thick)". Areas of the existing bridge deck removed at the direction of the Engineer to a depth greater than 1½" below the existing bridge deck surface shall be filled with LMC concurrent to the placement of the 1½" LMC Overlay. This material shall be measured and paid for ~~as SpecialProvision Job BB0805 "Latex Modified Concrete (Variable Depth)" at the unit price bid for the item.~~ in accordance with Special Provision Job No. BB0805 "Latex Modified Concrete Overlay". (1)

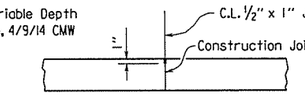
BRIDGE DECK: The LMC Overlay surface shall be given a grooved finish as specified for final finishing in Subsection 802.19 for Class 7 Grooved Bridge Roadway Surface Finish.

PROTECTIVE SURFACE TREATMENT: The longitudinal joint between the LMC Overlay and the adjacent existing concrete curb or rail shall be given a Class 3 Protective Surface Treatment as specified in Section 803 and in accordance with Special Provision Job BB0805 "Latex Modified Concrete Overlay". Transverse or longitudinal construction joints seperating adjacent Overlay placements shall be sealed in accordance with the Longitudinal Overlay Construction Joint Detail.

The roadway surface of the completed LMC Overlay shall be given a Class 1 Protective Surface Treatment as specified in Section 803.

TRANSVERSE JOINT REHABILITATION: After the placement of the LMC Overlay, the existing transverse slab joints at the intermediate bents shall be given a Type A Joint Rehabilitation as specified in Section 509.

(1) Revised Payment for Variable Depth Latex Modified Concrete, 4/9/14 CMW



Use ½" X 1" Type 3 or 4 Joint Sealer. See subsections 501.02 (h) and 501.05 (j). Backer Rod shall not be installed. Joint Sealer shall be measured and paid for as LMC Overlay. Sealant must be gray or other color similar to concrete.

Longitudinal construction joints shall be sawed as soon as the concrete has sufficiently set to allow sawing of the joint without damage to the Overlay.

LONGITUDINAL OVERLAY CONSTRUCTION JOINT DETAIL

STATE OF ARKANSAS
Carl L. Mueller
REGISTERED PROFESSIONAL ENGINEER
No. 7510
CARL L. MUELLER
4/9/14

BRIDGE ENGINEER

DETAILS OF LATEX MODIFIED CONCRETE OVERLAY

ROUTE 40 SEC. 22

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: CSL DATE: 9/13/13 FILENAME: bb0805_concoverlay.dgn

CHECKED BY: CMW DATE: 1/21/14 SCALE: NO SCALE

DESIGNED BY: CSL DATE: Sept 2013

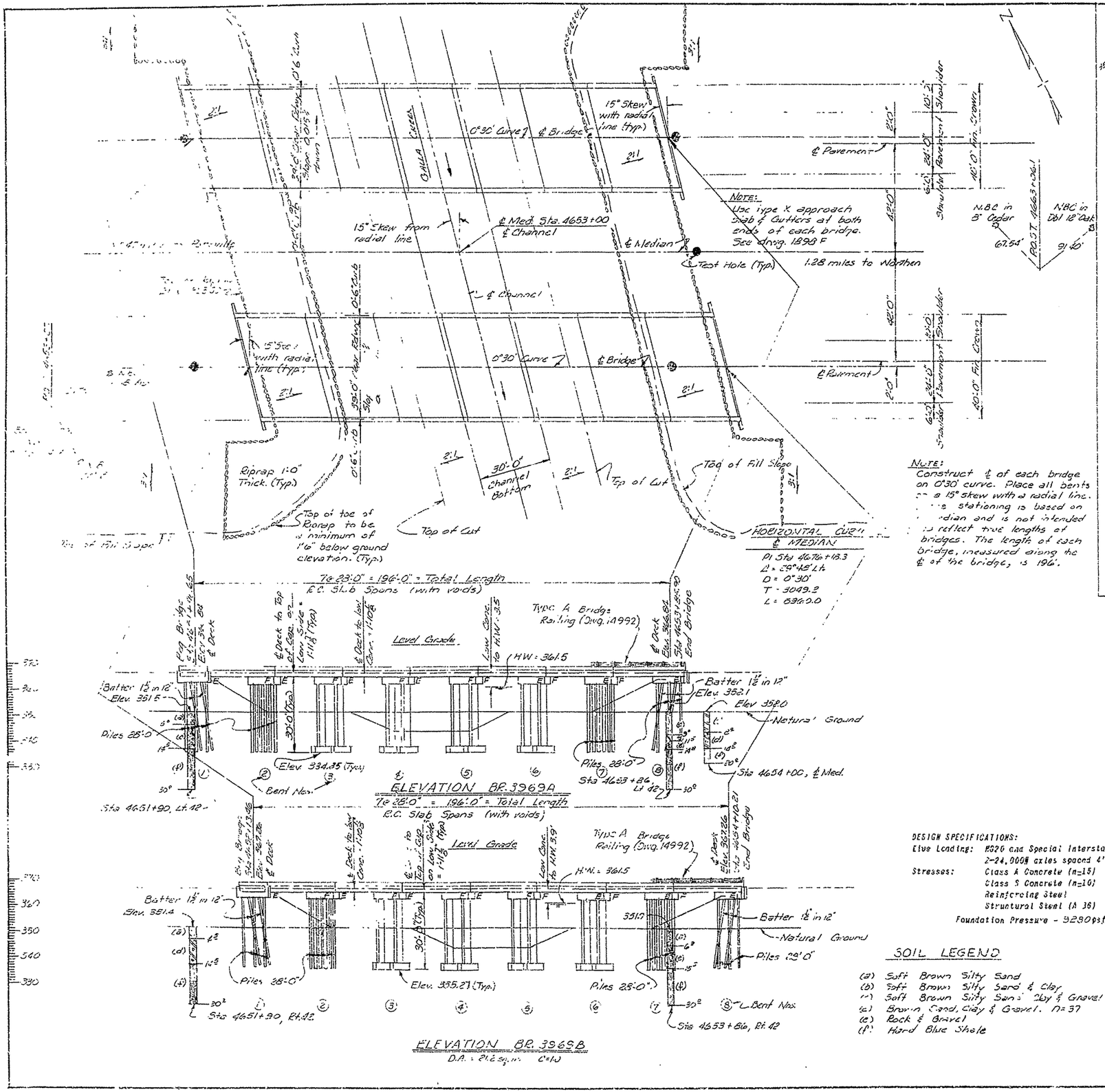
BRIDGE NO. A3969,B3969 DRAWING NO. 53016

PRINT DATE: 08-APR-2014

300

JOB NO.	STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	48	7-40 7-[illegible]-65	[illegible]	126

BB0805 62 81



GENERAL NOTES

Bench Mark - Nail in Root of 12" Pin Oak 86' Lt. Sta. 4655+30. Elevation 350.49.

All footings shall be set a minimum of 1'0" into rock. Rock excavations shall be made to neat lines of concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured in the dry directly against excavated surfaces of rock.

All piling shall be 12-BP-53 steel bearing piles driven with an approved air, steam or diesel hammer to a minimum bearing capacity of 40 tons per pile and into the material designated as Hard Blue Shale on the boring logs. Lengths of piling shown are for estimating quantities only. Order lengths shown; cut-off or build-up, if necessary, to be paid for in accordance with Section 804 of the Standard Specifications.

Piles in End Bents shall be driven after embankment is in place.

For Details of End Bents see Dwg. No. 13146
For Details of Intermediate Bents see Dwg. No. 13146 & 13147
For Details of Superstructure see Dwg. No. 15671A

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

DESIGN SPECIFICATIONS: AASHO 1961
Live Loading: H520 and Special Interstate Loading of 2-24,000# axles spaced 4'0" on centers
Stresses:
Class A Concrete (n=15) 840 psi
Class S Concrete (n=10) 1,200 psi
Reinforcing Steel 20,000 psi
Structural Steel (A 36) 20,000 psi
Foundation Pressure - 9280psf (S.R. III)

SOIL LEGEND

(a) Soft Brown Silty Sand
(b) Soft Brown Silty Sand & Clay
(c) Soft Brown Silty Sand, Clay & Gravel, N=4 or 5
(d) Brown Sand, Clay & Gravel. N=37
(e) Rock & Gravel
(f) Hard Blue Shale

FOR INFORMATION ONLY

LAYOUT OF BRIDGES
OVER GALLA CREEK
EAST END
RUSSELLVILLE BYPASS - POTTSVILLE
POPE COUNTY
INT. ROUTE 40 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: DFL DATE: 6-28-64
TRACED BY: DATE:
CHECKED BY: E.E. DATE: 2-2-65
SCALE: 1"=50'

53017

BRIDGE NO. 3969A&B DRAWING NO. ~~3139~~

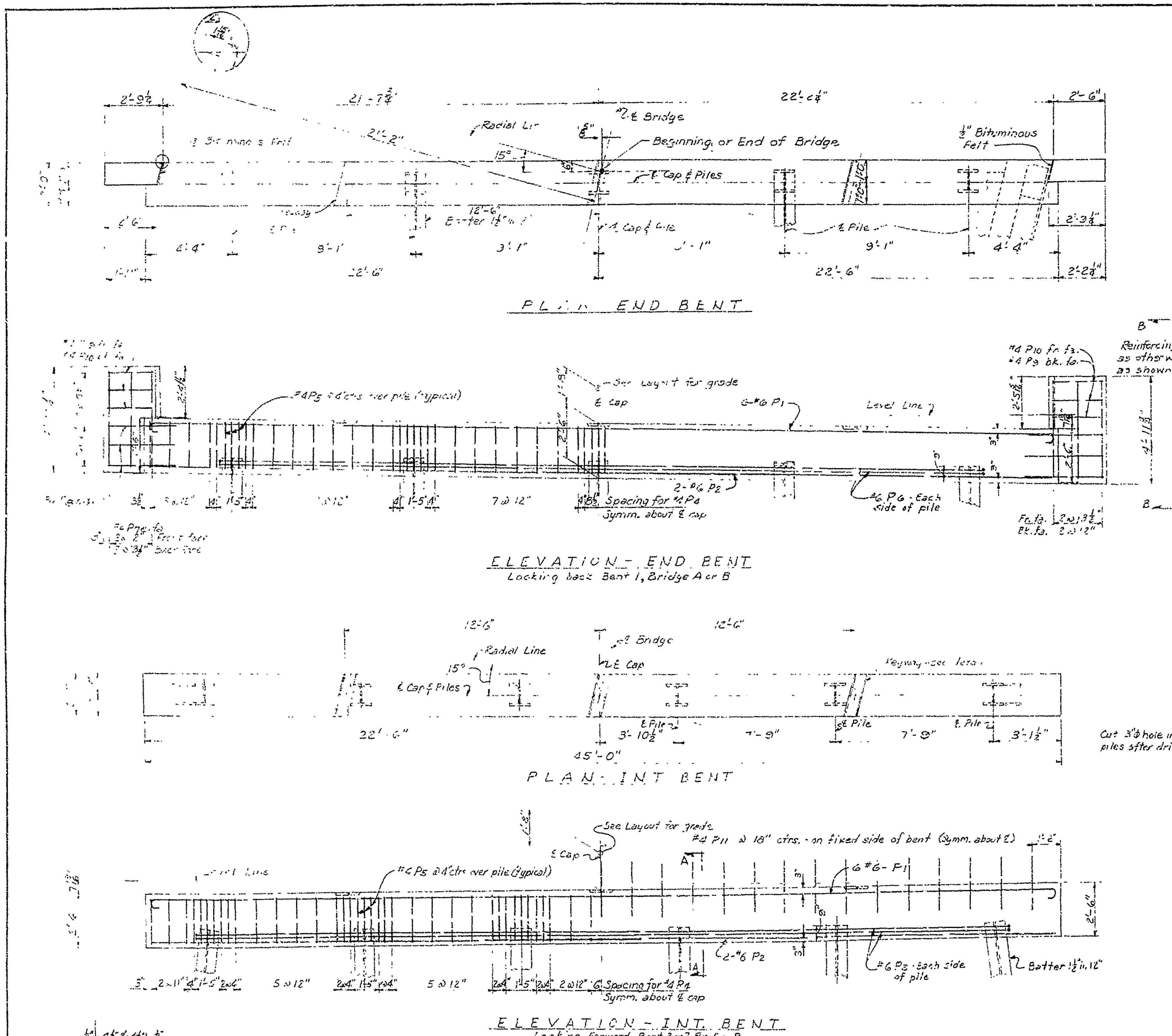
FED. ROAD NO.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET	TOTAL SHEETS
6	Ark.	I-40-2 (22) 85			
		~~5400~~ BB0805		~~17~~ 63	~~126~~ 81

BAR LIST

Mark	Size #	No. Req'd. End Bent	No. Req'd. Int. Bent	Length	Pin Dia.
P1	6	6	6	46'-1"	$4\frac{1}{2}$"
P2	6	2	2	44'-8"	Str.
P3	6	—	4	42'-9"	$2\frac{1}{4}$"
P4	4	50	58	8'-1"	$1\frac{1}{2}$"
P5	4	15	8	6'-4"	$1\frac{1}{2}$"
P6	6	4	—	40'-4"	$2\frac{1}{4}$"
P7	4	12	—	4'-6"	Str.
P8	4	12	—	3'-7"	Str.
P9	4	4	—	2'-2"	Str.
P10	4	6	—	2'-5"	Str.
P11	4	—	*	2'-6"	Str.

Bending Diagram — Dimensions to ctrs. of bars

* 29 for Fix-Exp bent, 58 for Fix-Fix Bent

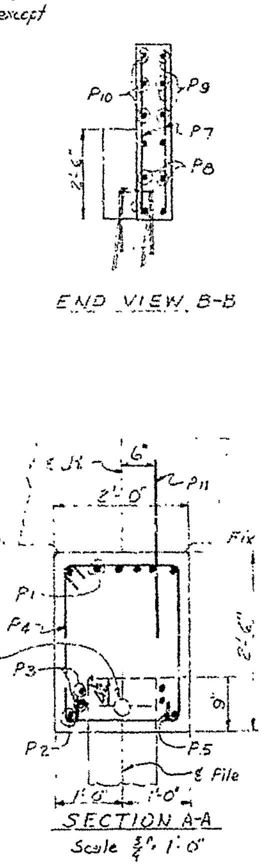


PLAN END BENT

ELEVATION - END BENT
Looking back Bent 1, Bridge A or B

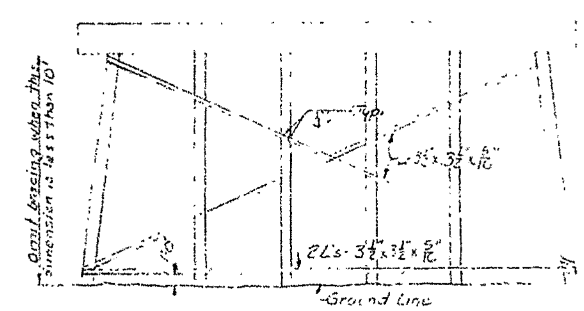
PLAN - INT. BENT

ELEVATION - INT. BENT
Looking Forward Bent 2 or 7, Br. A or B



END VIEW B-B

SECTION A-A
Scale $\frac{3}{4}$" = 1'-0"



The lengths of bracing member shall be determined in the field. Each member shall be one continuous angle and shall be welded to the steel piling as shown. Angle bracing shall be measured and paid for as "Structural Steel in Beam Spans."

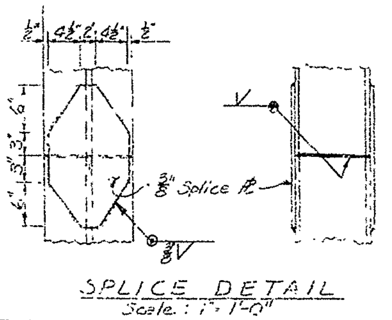
INT. BENT SHOWING BRACING
Scale: $\frac{1}{8}$" = 1'-0"

All concrete to be Class S. All exposed corners to be chamfered $\frac{3}{4}$".

Reinforcing bars shall be deformed bars of intermediate or hard grade. Shop lists and bending diagrams are to be submitted and approval secured before fabrication begins.

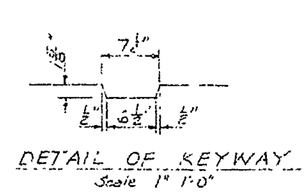
All piling shall be 12 BP 53 Steel Bearing Piles and shall be driven to a minimum bearing capacity of 45 tons.

For details of Beams see dwg. 13174



SPLICE DETAIL
Scale: 1" = 1'-0"

The Contractor may for his convenience and at his expense provide as many as three splices per pile. Minimum spacing between splices shall be 5 feet.



DETAIL OF KEYWAY
Scale 1" = 1'-0"

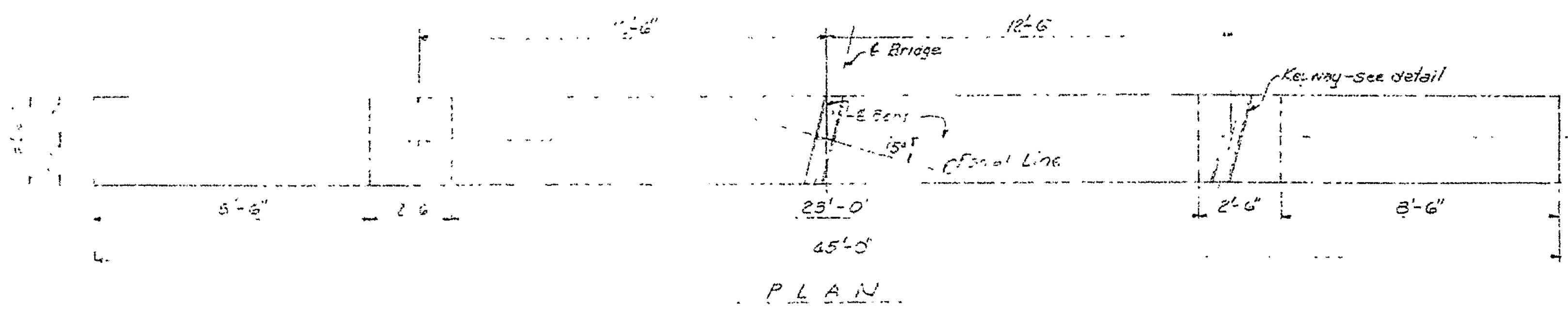
FOR INFORMATION ONLY

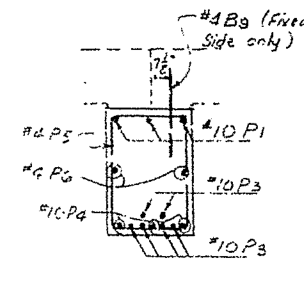
DETAILS OF PILE BENTS
BRIDGES OVER GALLA CREEK
EAST END RUSSELLVILLE BYPASS-POTTSVILLE
POPE COUNTY
INT. ROUTE 40 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

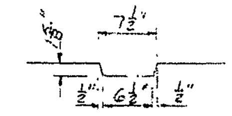
DRAWN BY: FMH DATE: 1-7-65
TRACED BY: DATE:
CHECKED BY: DFL DATE: 1-14-65
SCALE: $\frac{3}{4}$" = 1'-0" as noted

L. P. Carlson
BRIDGE ENGINEER

BRIDGE NO. 3969A&B DRAWING NO. ~~13146~~ 53018

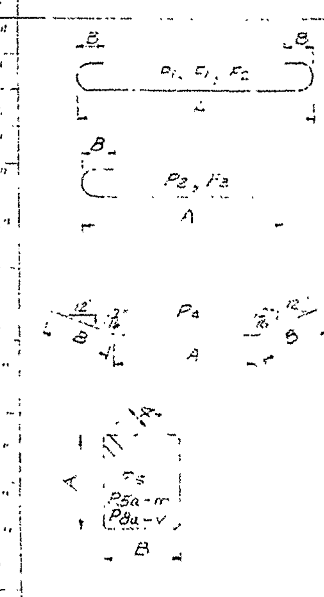




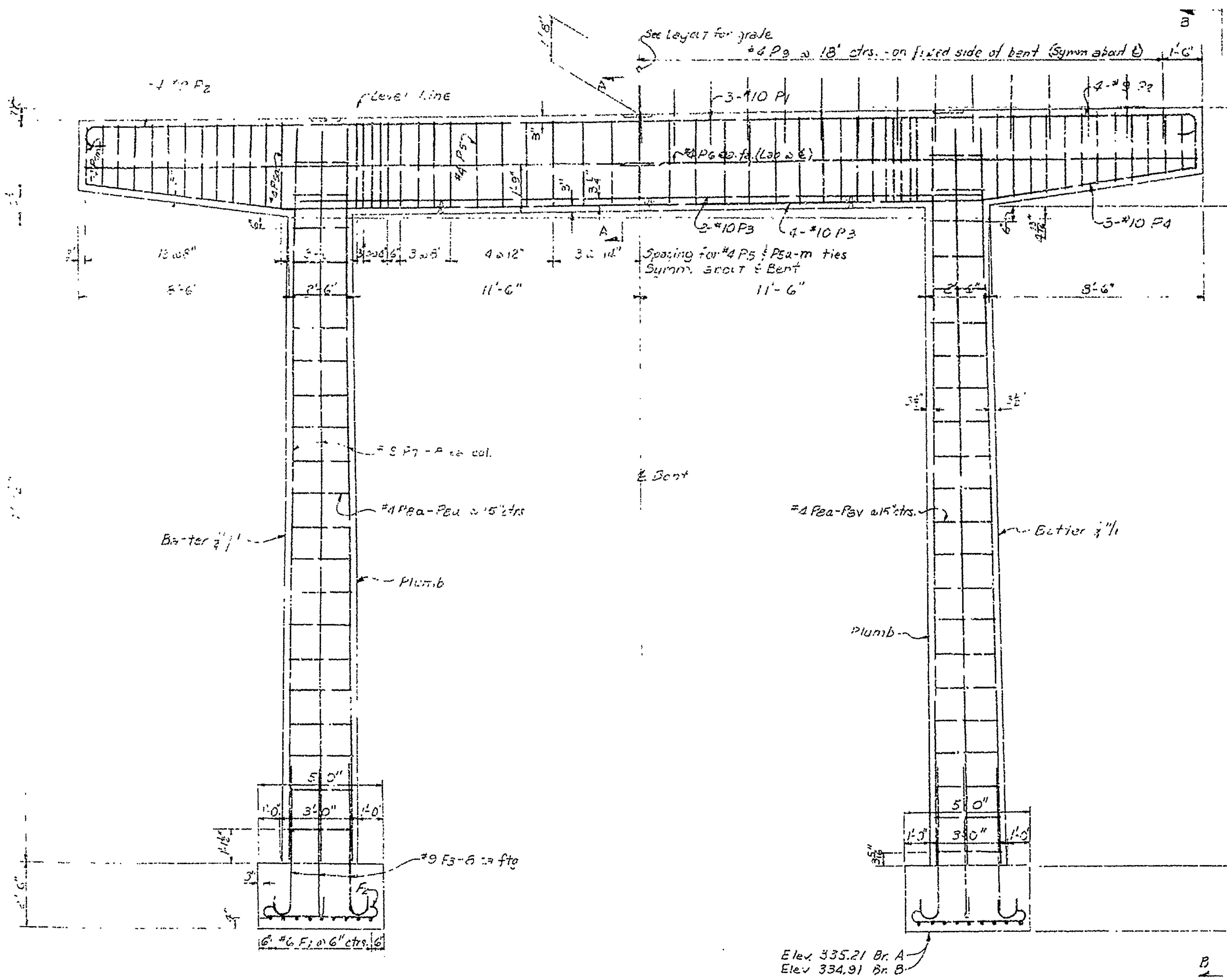


BAR LIST

MARK	SIZE #	NUMBER REQ'D	LENGTH	A	B	PIN DIA.
P1	10	3	47'-5"	44'-8"	11"	10"
P2	9	8	17'-9"	16'-6"	10"	9"
P3	10	6	38'-0"	–	–	Str.
P4	10	3	44'-5"	27'-10"	8'-4½"	10"
P5	4	31	11'-1"	3'-1½"	2'-1½"	1½"
P5a-P5m	4	2 Each	Varies 11'-0" to 3'-2"	Varies 3'-1" to 2'-2"	2'-1½"	1½"
P6	4	4	23'-2"	–	–	Str.
P7	9	16	27'-3"	–	–	Str.
P8a-P8u	4	2 Each	Varies 8'-8" to 11'-3½"	Varies 2'-0" to 3'-0½"	Varies 2'-0½" to 2'-6¾"	1½"
P8v	4	1	11'-11"	3'-1"	2'-7"	1½"
F1	6	18	8'-11"	7'-6"	6"	4½"
F2	6	20	5'-11"	4'-6"	6"	4½"
F3	9	16	7'-1"	5'-10"	10"	9"
P9	4	29 F-E 58 F-F	2'-6"	–	–	Str.

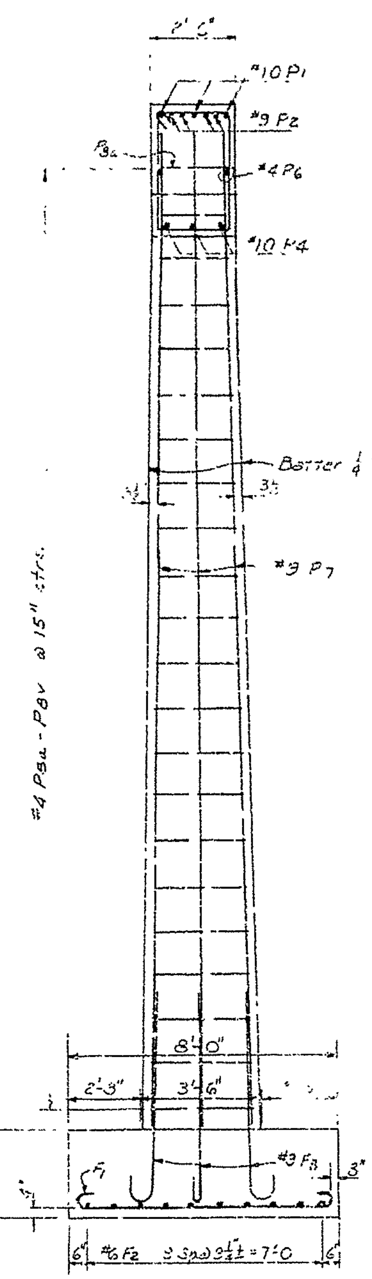


Dimensions are to ctrs. of bars



ELEVATION

Bents 3-6, Br. A or B, Looking Forward



END VIEW B-B

NOTES

Concrete in cap shall be Class S. Concrete in columns and ftgs. shall be Class A. Exposed corners shall be chamfered ¾".
Reinforcing Steel shall be [illegible] bars [illegible] hard grade. [illegible] bending diagrams [illegible] shall be [illegible] fabrication is begun.

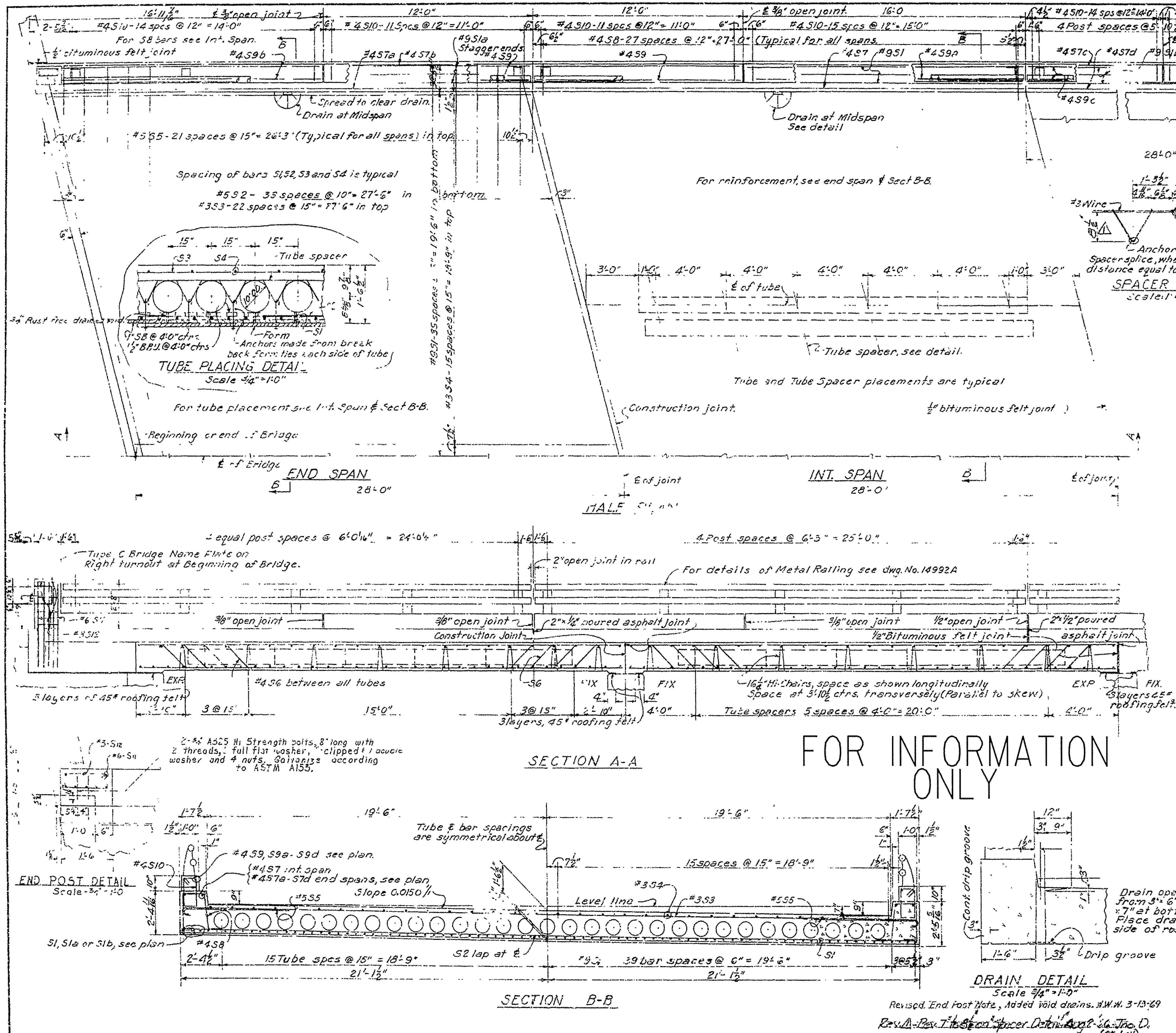
FOR INFORMATION ONLY

DETAILS OF BENTS 3-6
BRIDGES OVER GALLA CREEK
EAST END RUSSELLVILLE BYPASS - POTTSVILLE
POPE COUNTY
INT. ROUTE 40 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: FMH DATE: 1-12-65
TRACED BY: DATE:
CHECKED BY: VAY DATE: 1-15-65
SCALE: ⅜"=1'-0"

BRIDGE ENGINEER

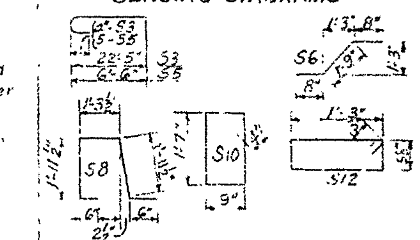
BRIDGE NO. 3969 A&B DRAWING NO. ~~13147~~ 53019



BAR LIST

MARK	SIZE	NO. REQ'D END	NO. REQ'D INT	LENGTH 15° SK	PIN DIA
S1	9	79	85	27'-8	Str.
S1a	9	3		28'-4	
S1b	9	3		27'-11	
S2	5	68	68	22'-10	Str
S3	3	46	46	22'-10	2 1/4"
S4	3	32	32	27'-8	Str
S5	5	44	44	7'-1	3 3/4"
S6	4	240	240	3'-1	1 1/2"
S7	4		4	27'-2	Str.
S7a		1		28'-3	
S7b		1		28'-7	
S7c		1		27'-10	
S7d		1		28'-2	Str.
S8		56	56	6'-1	1 1/2"
S9		2	4	11'-8	Str.
S9a			4	15'-8	
S9b		2		16'-3	
S9c		2		14'-5	
S9d		2		12'-10	Str.
S10	4	54	56	5'-3	1 1/2"
S11	6	14		4'-6	Str.
S12	3	8		3'-10	1 1/4"

BENDING DIAGRAMS



Dimensions are to centers of bars

GENERAL NOTES:

All concrete to be Class S. All exposed corners to be chamfered 3/4" unless otherwise noted.

Reinforcing steel to be deformed bars of intermediate or hard grade. Shop lists and bending diagrams must be submitted and approval secured before fabrication is begun.

All cylindrical tubes used to form voids shall be of moisture protected, laminated type construction, minimum thickness 0.225" and shall be furnished complete with end closures.

All reinforcing steel and fiber tubes shall be accurately located in the forms and firmly held in place by means of steel wire supports and spacers for tubes of a sufficient number and size to prevent displacement during the course of construction, but in no case of lesser design than that shown.

Wire supports for reinforcing bars will not be paid for directly but will be considered subsidiary to the item "Reinforcing Steel". Tubes for forming voids and wire supports and spacers for tubes will not be paid for directly, but will be considered subsidiary to the item "Class S Concrete".

Shop lists and diagrams of wire supports and spacers for tubes shall be submitted for approval before fabrication is begun.

Roofing felt, bituminous felt and poured asphalt joints shall be measured and paid for as Class S Concrete.

For details of Metal Railing see Dwg. No. 14992A. Metal Railing including posts and fastenings shall be paid for at the unit price per linear foot bid for Metal (Aluminum or Steel) Bridge Railing.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

DESIGN SPECIFICATIONS: AASHO 1965

Design Live Loading: HS20 and Special Interstate Loading of two 24,000# axles spaced 4'0" on centers.
Load Distribution to Slab: Dead load-188 psf; Live Load-0.178 wheels/ft of width plus 30% impact.
Unit Stresses: Class S Concrete (n=10) 1,200 psi
Reinforcing Steel 20,000 psi

DETAILS OF STANDARD
28'-0" R C SLAB SPAN (WITH VOIDS)
39'-0" CLEAR ROADWAY 2 CURBS 0'-6"
15° SKEW RT. FORWARD

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

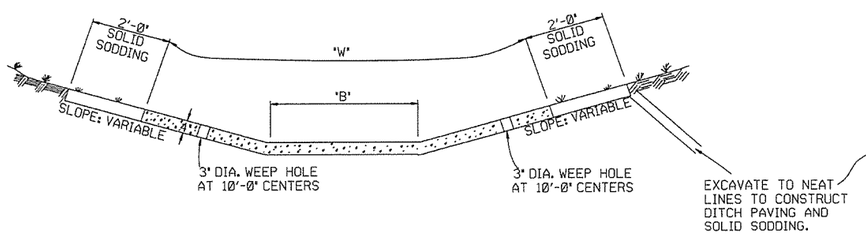
DRAWN BY: W.E.H. DATE: 1-19-65
TRACED BY: DATE:
CHECKED BY: FMH DATE: 1-19-65
SCALE: 3/8" = 1'-0" or shown

Rev. A - Rev. 7" Tube Spacer Detail Aug. 2 '66 Tro. D. (Ck. J.W.H.)

BRIDGE ENGINEER

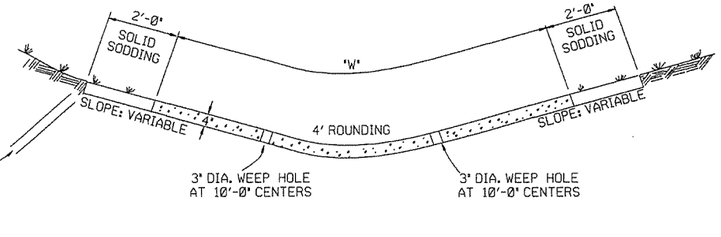
BRIDGE NO. 53020 DRAWING NO. 15071 A

REFER TO TABULATION OF QUANTITIES FOR 'W' & 'B' DIMENSIONS



TYPE A

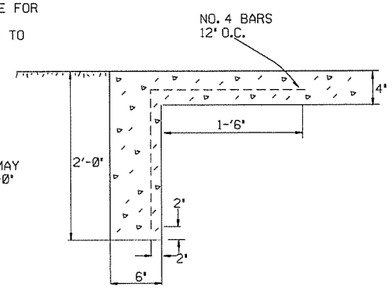
REFER TO TABULATION OF QUANTITIES FOR 'W' DIMENSIONS



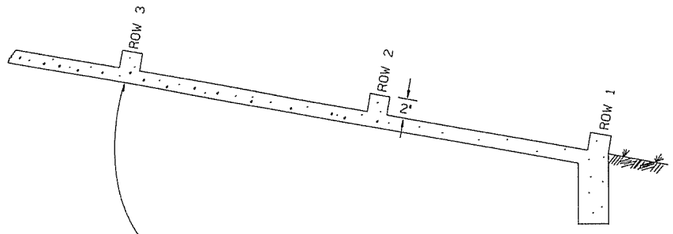
TYPE B

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.'

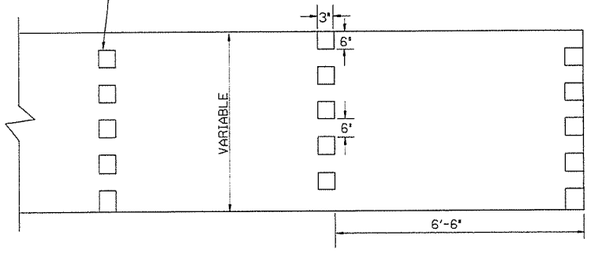
TOE WALL DEPTH MAY BE ALTERED TO 1'-0" WHEN DIRECTED BY THE ENGINEER IN ROCK EXCAVATION



TOE WALL DETAIL FOR CONCRETE DITCH PAVING



NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED



ENERGY DISSIPATORS
(NO SCALE)

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 UNCLUDED IN THE PRICE BID 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.

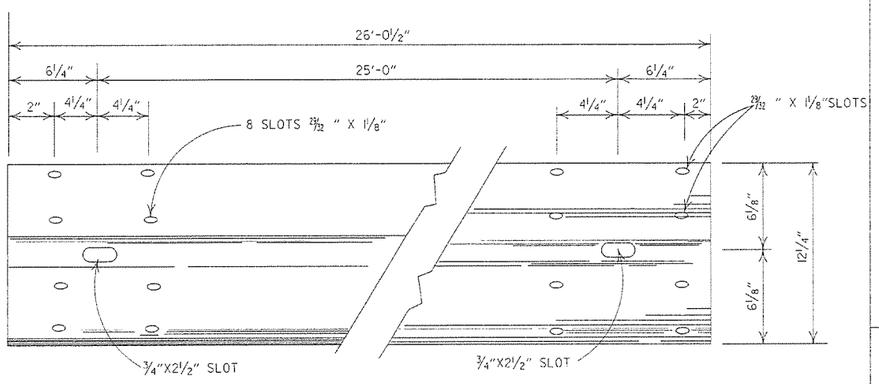
1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.

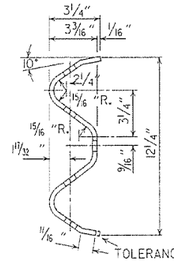
DATE	REVISION	DATE FILM'D
11-17-10	ADDED GENERAL NOTE	
6-2-94	ADDED GENERAL NOTE ABOUT SOLID SODDING	
11-30-8	ELIMINATED MIN. ROWS OF ELEMENTS	111-30-89
7-15-88	REVISED DISSIPATOR NOTE	653-7-15-88
4-3-87	REVISED ENERGY DISSIPATOR	671-4-3-87
1-9-87	MODIFIED NOTE ON ENERGY DISS.	532-1-9-87
11-3-86	ADDED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

ARKANSAS STATE HIGHWAY COMMISSION

CONCRETE DITCH PAVING

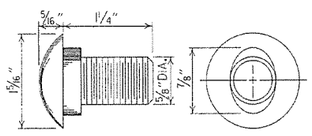
STANDARD DRAWING CDP-1



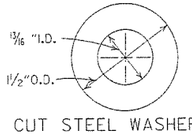


DETAILS OF W-BEAM GUARD RAIL

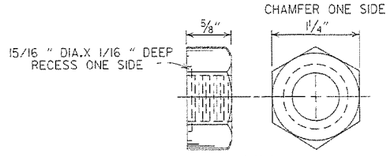
RAIL SECTION OF CLOSELY SIMILAR DIMENSIONS AND COMPARABLE STRENGTH MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



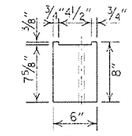
SPLICE BOLT
POST BOLT - SAME EXCEPT LENGTH



CUT STEEL WASHER

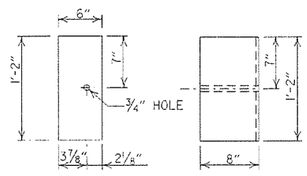


NUT

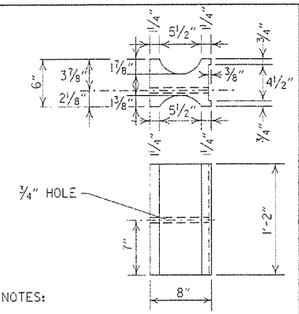


WOOD BLOCKOUT USED WITH WOOD POSTS SHALL BE 6"x8"x1'-2" WITH NO NOTCH REQUIRED.

TOP



WOOD BLOCKOUT (W-BEAM)

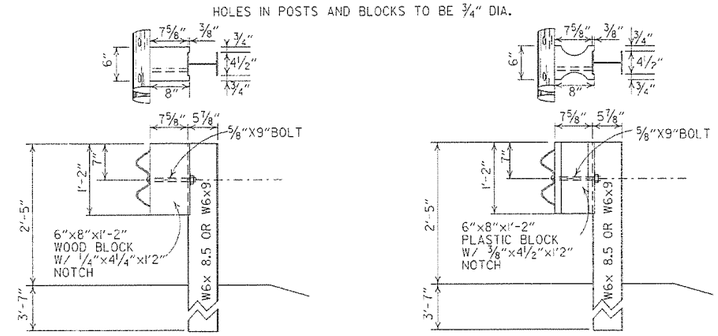


NOTES:

1. SIMILAR SHAPED PLASTIC BLOCKOUTS MAY BE USED AS LONG AS THEY MEET NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
2. DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCES.

PLASTIC BLOCKOUT (W-BEAM)

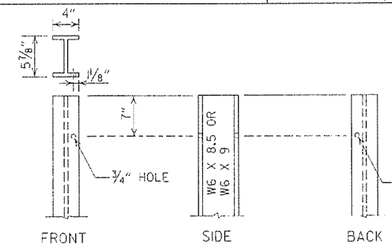
HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.



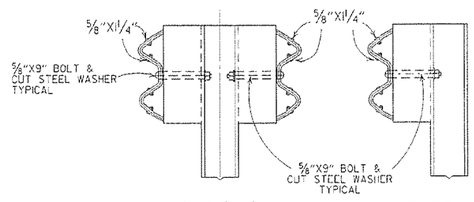
WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)



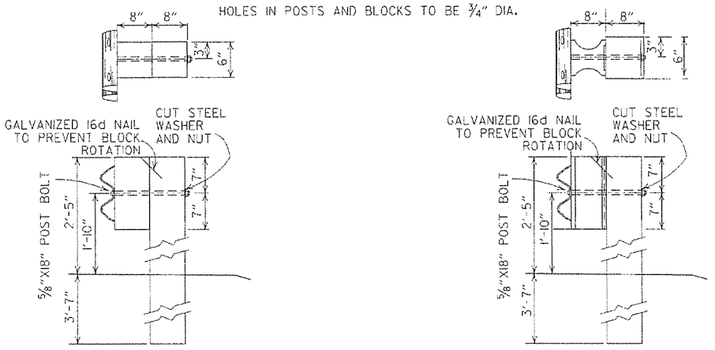
STEEL POST



TYPE "B" TYPE "A"

DETAILS OF STEEL LINE POST CONNECTIONS (W-BEAM)

HOLES IN POSTS AND BLOCKS TO BE ¾" DIA.



WOOD BLOCKOUT CONNECTIONS

PLASTIC BLOCKOUT CONNECTIONS

DETAILS OF WOOD LINE POST CONNECTIONS (W-BEAM)

-GENERAL NOTES-

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN ¾" BEYOND IT.

WHERE W-BEAM GUARD RAIL CONTINUES, THE INTERMEDIATE SECTIONS SHALL HAVE A POST SPACING OF 6'-3" UNLESS OTHERWISE NOTED.

W-BEAM GUARD RAIL REPRESENTING INTERMEDIATE SECTIONS WILL BE MEASURED ALONG THE ROADWAY FACE FROM CENTERLINE OF POST TO CENTERLINE OF POST.

USE W-BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB. FOR EXTENSIONS OR MODIFICATION OF EXISTING GUARD RAIL, W-BEAM GUARD RAIL COMPONENTS OF THE SAME TYPE AS THOSE EXISTING SHALL BE USED.

ANY BACKFILLING UNDER OR AROUND POST SHALL BE DAMP SAND THOROUGHLY TAMPED IN PLACE.

WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO.1 STRUCTURAL OR BETTER 9.7# (1400 f) OR NO.1 1350 f SOUTHERN PINE.

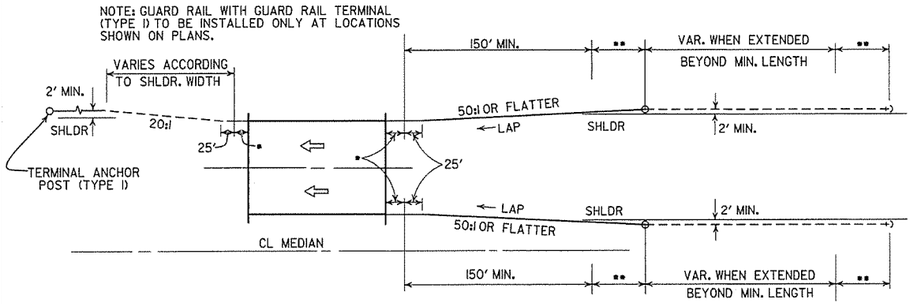
CONTRACTOR SHALL HAVE THE OPTION OF USING WOOD BLOCKOUTS FOR W-BEAM GUARD RAIL OR PLASTIC BLOCKOUTS, AS LONG AS BLOCKOUT USED MEETS NCHRP-350 TEST LEVEL 3 SPECIFICATIONS OR REQUIREMENTS FOR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) FOR W-BEAM GUARD RAIL.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
0-15-09	ADDED REFERENCE TO MASH	
4-10-03	REVISED GENERAL NOTES	
9-22-02	REVISED DIMENSION ON WOOD & PLASTIC BLOCKOUT CONNECTIONS & ON STEEL POST	
11-16-01	REVISED WOOD BLOCKOUT & DETAILS OF WOOD LINE POST CONNECTIONS	
3-30-00	REMOVED GUARD RAIL AT BRIDGE ENDS	
1-12-00	ADDED PLASTIC BLOCKOUT	
8-12-98	REV. BLOCKOUTS TO WOOD, DELETED CONC. POST & REV. GENERAL NOTE, DELETED DET. OF GUARD RAIL REPLACE. BEHIND CURB & DET. OF POST PLACE. IN SOLID ROCK, & ADDED DETAILS OF STEEL LINE POST CONN. REMOVED BACK-UP PLATE, REVISED HOLES IN STEEL POLES	
4-3-97	REMOVED "LAP IN DIRECTION OF TRAFFIC" NOTE & PLACED ARROWS ON WASHERS	
10-18-96	REVISED WOOD POST NOTE	
6-2-94	ADDED 4" T. STEEL POST SIZE	
8-5-93	REVISED STEEL POST SIZE	8-5-93
10-1-92	REDRAWN & REVISED	10-1-92
8-15-91	REVISED WASHER NOTE	8-15-91
8-2-90	REV. GEN. NOTE & DEPHT OF ANC. POST IN ROCK	8-2-90
7-15-88	REVISED SECTION 3 & GENERAL NOTES	
3-4-88	REV. ANCHOR POST, ELEV. NOTES & POST IN ROCK	780-3-4-88
10-30-87	REVISED WOOD LINE POST DETAIL	546-10-30-87
10-9-87	REDRAWN & REVISED	802-10-9-87

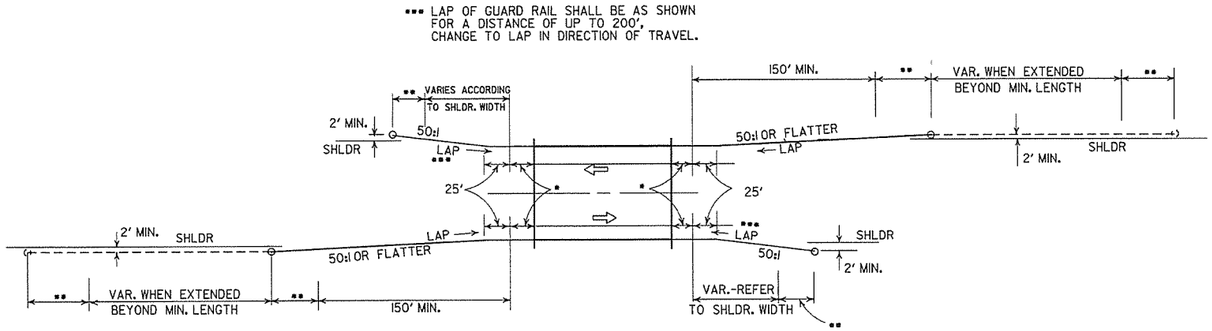
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-8

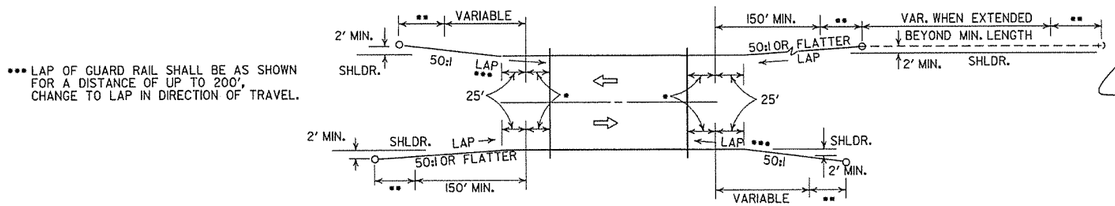


ONE-WAY TRAFFIC

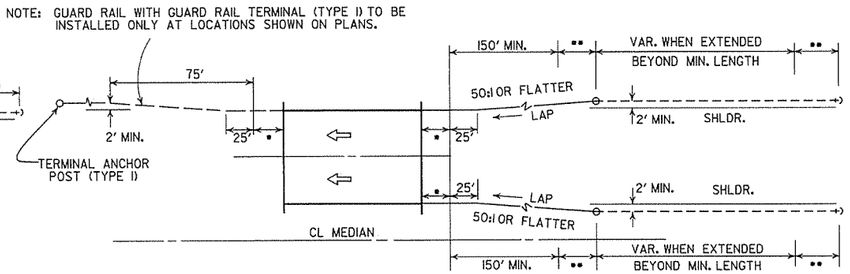


TWO-WAY TRAFFIC

METHODS OF INSTALLATION OF GUARD RAIL AT LESS THAN FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)



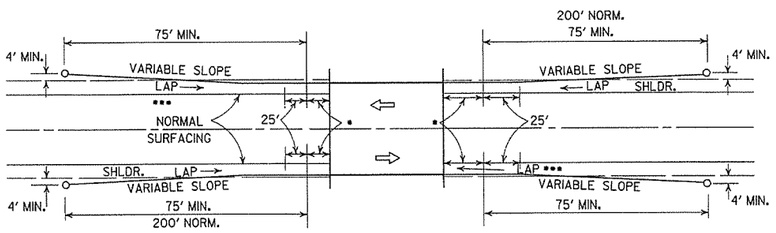
TWO-WAY TRAFFIC



ONE-WAY TRAFFIC

METHOD OF INSTALLATION OF GUARD RAIL AT FULL SHOULDER WIDTH BRIDGES USING GUARD RAIL TERMINAL (TYPE 2)

••• LAP OF GUARD RAIL SHALL BE AS SHOWN FOR A DISTANCE OF UP TO 200', CHANGE TO LAP IN DIRECTION OF TRAVEL.



LEGEND

- • THRIE BEAM GUARD RAIL TERMINAL
- •• GUARD RAIL TERMINAL (TYPE 2)

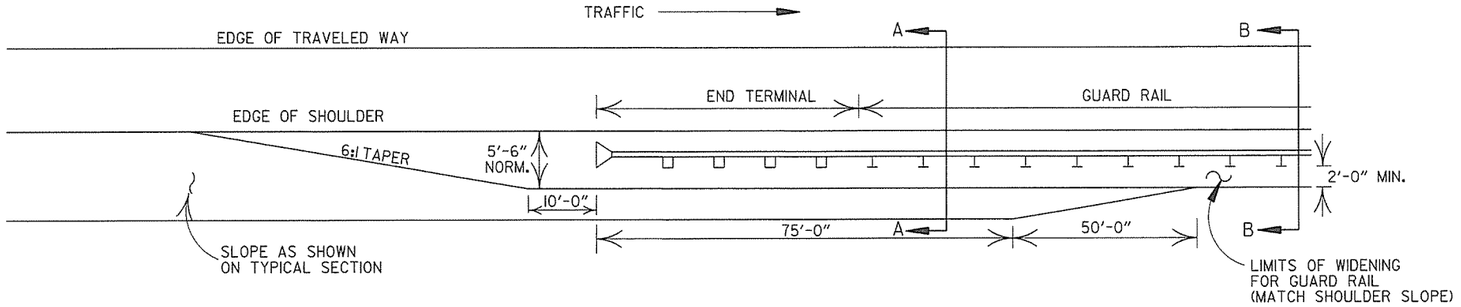
METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERMINAL (TYPE I) (FULL SHOULDER WIDTH OR LESS BRIDGES)

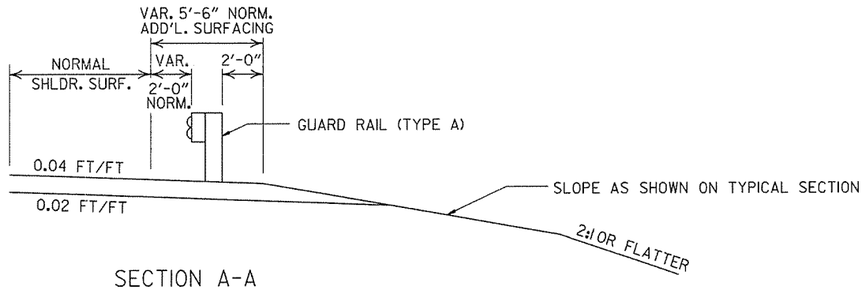
DATE	REVISION	DATE FILM
4-17-08	REVISED LAYOUTS	
11-10-05	REMOVED GUARD RAIL NOTES AND DETAILS	
11-16-01	DELETED NOTE-METHOD OF INSTALLATION OF GUARD RAIL USING GUARD RAIL TERM. (TY. I)	
1-12-00	ADDED CONSTRUCTION NOTE	1-12-00
6-26-97	REVISED LAYOUT	
10-1-92	REDRAWN & REVISED	10-1-92
	ADDED NOTE	
10-9-87	REDRAWN & REVISED	

ARKANSAS STATE HIGHWAY COMMISSION

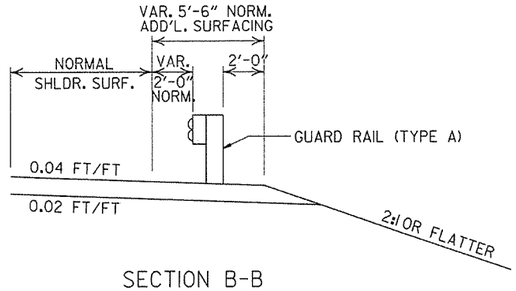
GUARD RAIL DETAILS

STANDARD DRAWING GR-9





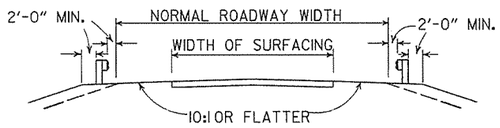
SECTION A-A



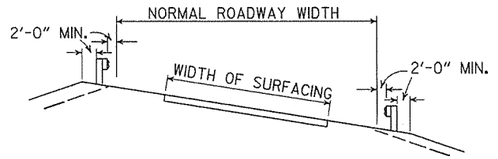
SECTION B-B

DETAILS OF WIDENING FOR GUARD RAIL

NOTE: NORMAL SECTION TO BE WIDENED APPROX. 5'-6" EACH SIDE TO SUPPORT GUARD RAIL.

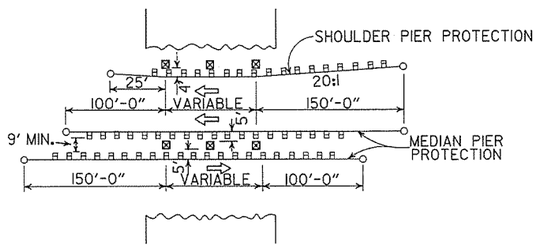


SECTION ON TANGENT



SECTION ON CURVE

DETAILS SHOWING POSITION OF GUARD RAIL ON HIGHWAY



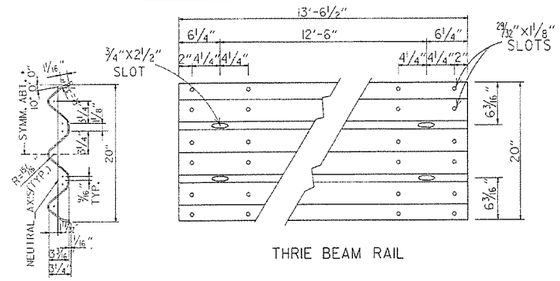
METHOD OF INSTALLATION OF GUARD RAIL AT FIXED OBSTACLE

DATE	REVISION	DATE FILM
4-17-08	MINOR REVISION	
11-10-05	DRAWN	

ARKANSAS STATE HIGHWAY COMMISSION

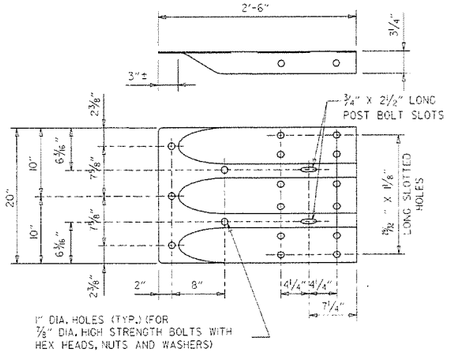
GUARD RAIL DETAILS

STANDARD DRAWING GR-9A



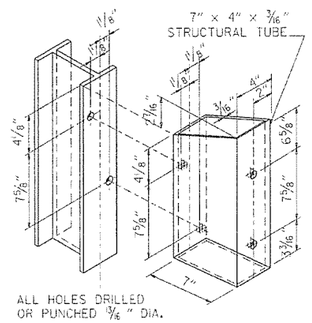
THRIE BEAM RAIL

SECTION THRU THRIE BEAM RAIL



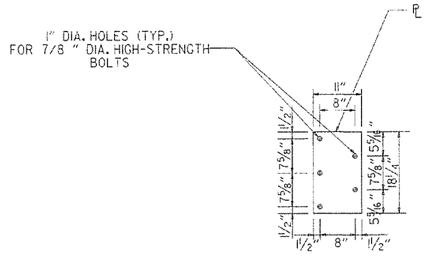
1" DIA. HOLES (TYP.) (FOR ⅞" DIA. HIGH STRENGTH BOLTS WITH HEX HEADS, NUTS AND WASHERS)

SPECIAL END SHOE



STRUCTURAL STEEL TUBING BLOCKOUT DETAIL

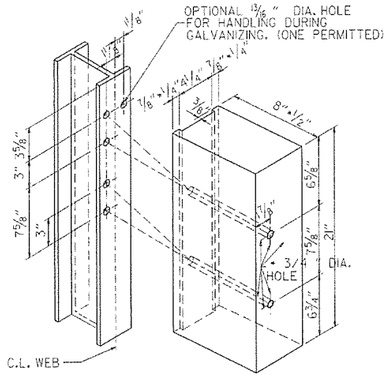
ATTACH BLOCKOUT TO POST USING ⅝" DIA. HEX HEAD BOLTS WITH 1½" O.D. CUT STEEL WASHERS AND NUT.



CONNECTOR PLATE

CONNECTOR PLATE SHALL BE AASHTO M270, GR. 36 AND SHALL BE GALVANIZED AFTER FABRICATION. GALVANIZING SHALL CONFORM TO SUBSECTION 807.19 OF THE STANDARD SPECIFICATIONS. CONNECTOR PLATE TO BE BOLTED TO SPECIAL END SHOE USING ⅞" DIA. HIGH STRENGTH BOLTS, WITH THE HEADS PLACED ON THE TRAFFIC FACE. WASHERS SHALL BE USED UNDER THE HEAD AND NUT. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND SHALL CONFORM TO SUBSECTION 807.06.

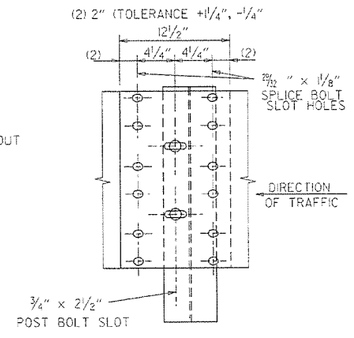
NOTE:
SEE STANDARD DRAWING GR-10A FOR GUARD RAIL POST EMBEDMENT DEPTHS.



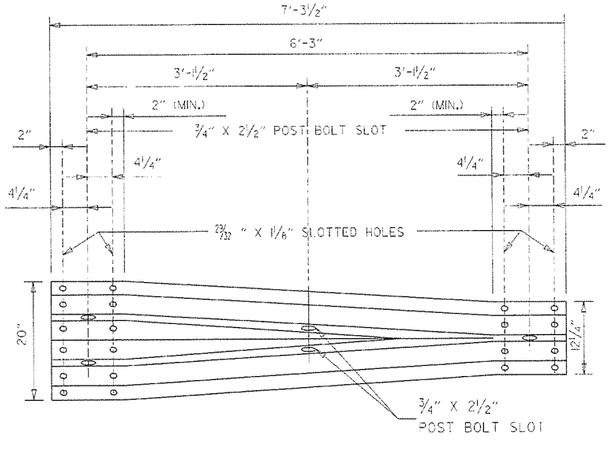
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED

HOLE PUNCHING DETAIL
FOR STEEL POST & WOOD OR PLASTIC BLOCKOUTS

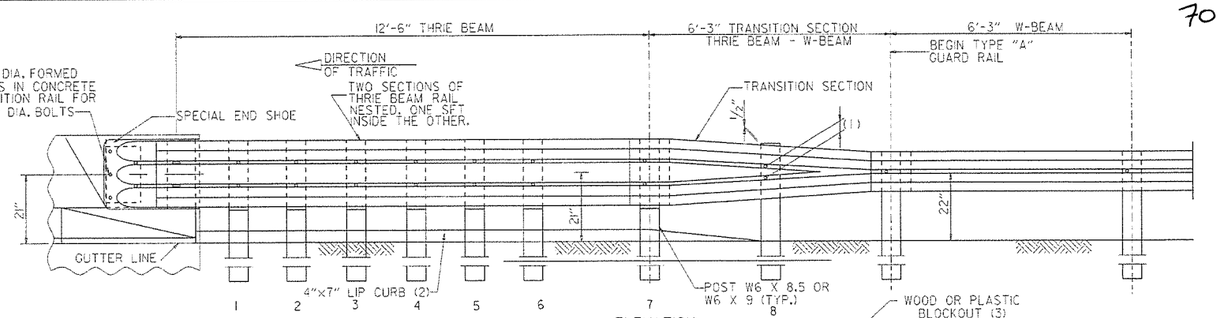
NOTE: BLOCKS SHALL BE THE SAME TYPE THROUGHOUT THE PROJECT LIMITS.



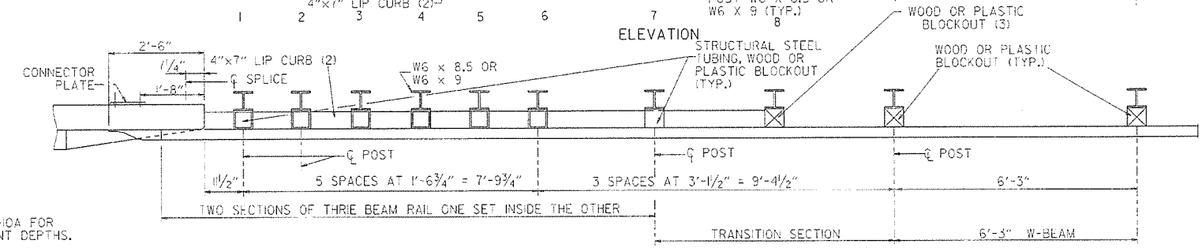
THRIE BEAM RAIL SPLICE AT POST



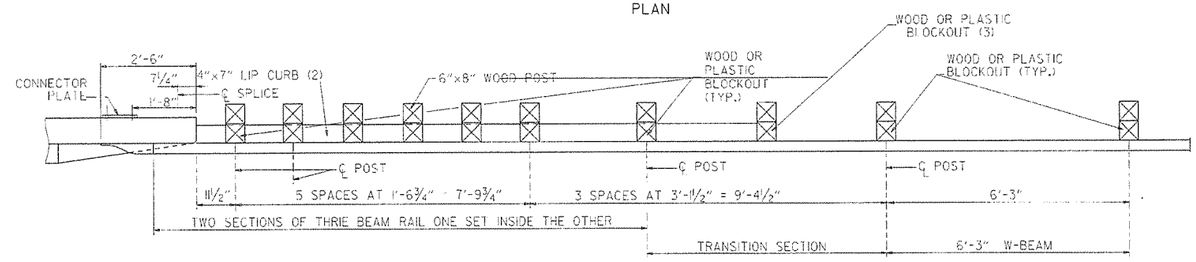
TRANSITION SECTION



ELEVATION



PLAN



PLAN

(1) VERIFY BOLT SPACING FROM RAIL TRANSITION PRODUCER.
(2) REFER TO APPROACH GUTTER DETAILS.
(3) LENGTH OF BLOCKOUT ON POST 8 TO BE MODIFIED TO FIT RAIL WIDTH.

THRIE BEAM GUARD RAIL CONNECTION AT BRIDGE ENDS

GENERAL NOTES:

THE THRIE BEAM RAIL, SPECIAL END SHOE, AND THE TRANSITION SECTION SHALL BE MADE OF STEEL AND SHALL BE 12 GAGE. ZINC COATING SHALL BE TYPE 1.

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

ALL BOLTS SHALL BE SUFFICIENT LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE NUT AND NO MORE THAN ¾" BEYOND IT.

ALL LAP SPLICES, INCLUDING SPECIAL END SHOES, SHALL BE MADE IN THE DIRECTION SHOWN ON STANDARD DRAWINGS GR-9 & GR-11.

WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7# (1400 ƒ) OR NO. 1 1350 ƒ SOUTHERN PINE.

REFER TO STD. DRWG. GR-10A FOR POST DETAILS.

USE THRIE BEAM GUARD RAIL COMPONENTS OF SAME MATERIAL FOR ENTIRE JOB.

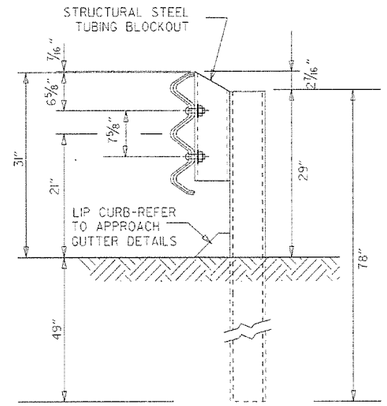
THRIE BEAM POSTS SHALL BE SAME MATERIAL AS W-BEAM POSTS FOR ENTIRE JOB.

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF W-BEAM 1"	
11-29-07	ADDED PLASTIC BLOCKOUTS	
11-10-05	ADDED NOTE FOR ATTACHING STEEL BLOCKOUT	
11-18-04	REVISED GENERAL NOTES	
10-9-03	REVISED GENERAL NOTES	
4-10-03	REVISED GENERAL NOTES	
8-22-02	REVISED NOTE (2)	
6-29-00	MOVED DIMENSION LINES	
5-18-00	ADDED NOTE	
3-30-00	DRAWN & ISSUED	

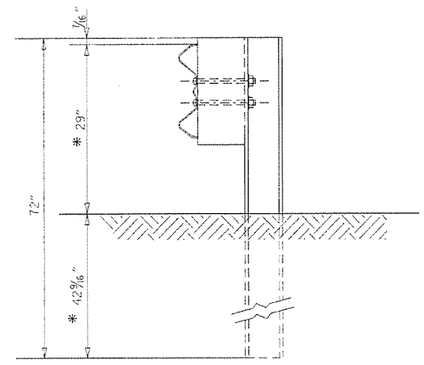
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10

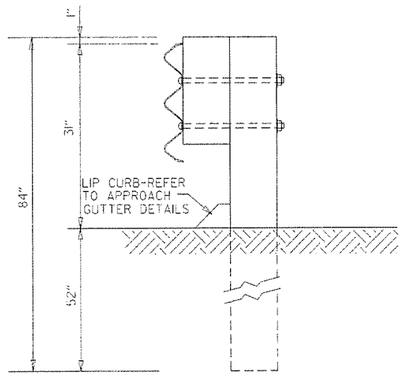


THRIE BEAM RAIL WITH STEEL TUBING BLOCKOUT
AND STEEL POST
POSTS 1-7

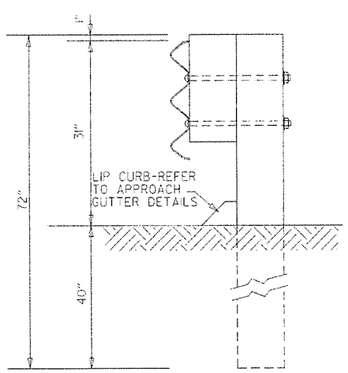


W-BEAM TO THRIE BEAM TRANSITION RAIL
WITH WOOD OR PLASTIC BLOCKOUT AND STEEL POST
POST 8

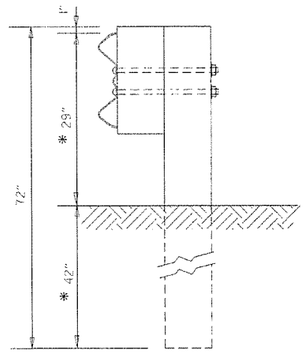
* NOTE:
THESE DIMENSIONS WILL NEED TO BE ADJUSTED IN THE FIELD TO MAKE THE TRANSITION FROM 21" MID POINT OF THRIE BEAM TO 22" MID POINT OF W-BEAM.



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUTS & WOOD POSTS
POSTS 1-6



THRIE BEAM RAIL
WITH WOOD OR PLASTIC
BLOCKOUT & WOOD POST
POST 7



W-BEAM TO THRIE BEAM
TRANSITION RAIL WITH WOOD OR
PLASTIC BLOCKOUT & WOOD POST
POST 8

GENERAL NOTES:

RAIL POSTS SHALL BE SET PERPENDICULAR TO THE ROADWAY PROFILE GRADE AND VERTICALLY IN CROSS SECTION.

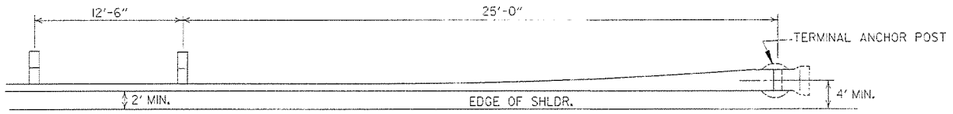
WOOD POSTS & WOOD BLOCKS SHALL BE EITHER DENSE NO. 1 STRUCTURAL OR BETTER 9.7 f (1400 f) OR NO. 1 1350 f SOUTHERN PINE.

DATE	REVISION	DATE FILM
7-14-10	REVISED POST 8 DIMENSIONS	
11-29-07	ADDED PLASTIC BLOCKOUTS	
8-22-02	REVISED LIP CURB NOTE	
3-30-00	DRAWN & ISSUED	

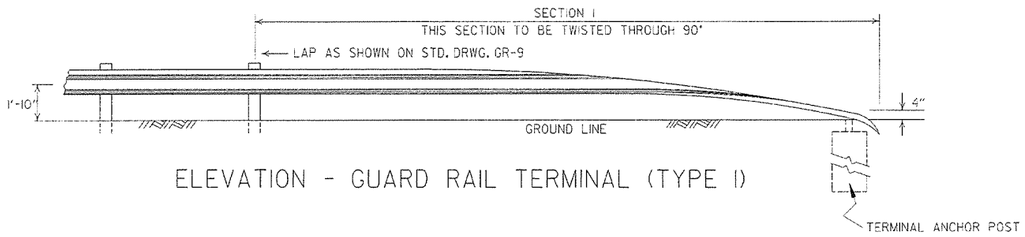
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

STANDARD DRAWING GR-10A

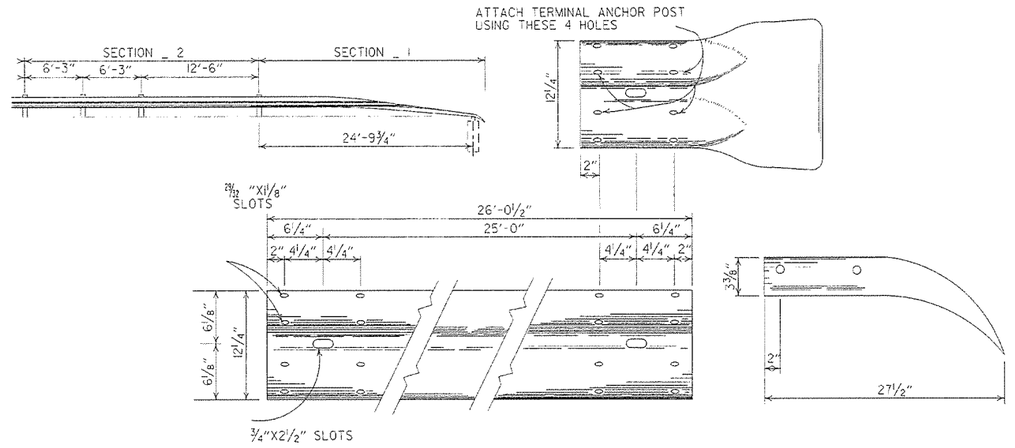


PLAN - GUARD RAIL TERMINAL (TYPE I)



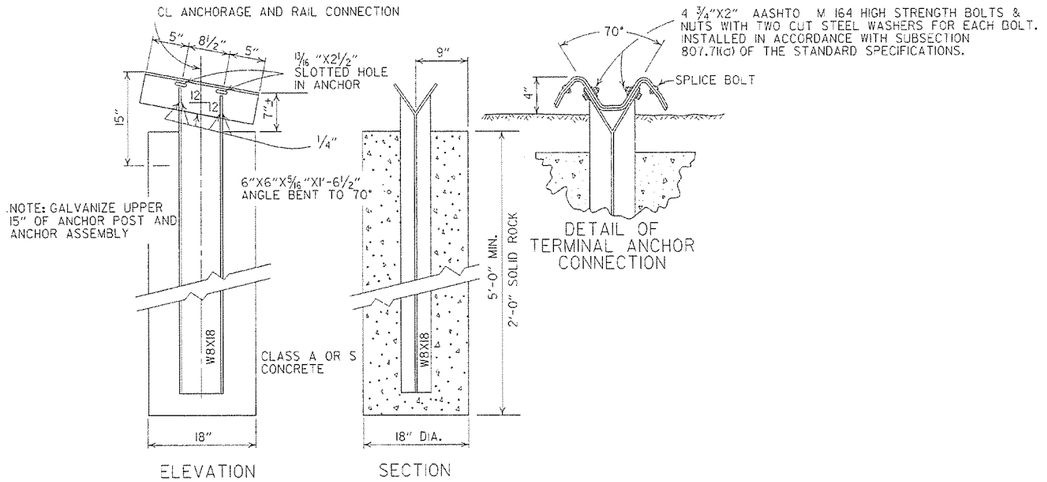
ELEVATION - GUARD RAIL TERMINAL (TYPE I)

NOTE:
SECTIONS 1 AND 2 OF GUARD RAIL TERMINAL SHALL BE PAID FOR AT THE PRICE BID PER LINEAR FOOT OF THE TYPE OF GUARD RAIL SPECIFIED.



SECTION 1

TERMINAL SECTION



ELEVATION

SECTION

NOTE: RAIL MEMBERS MAY BE BOLTED TO ANGLE AT TERMINAL ANCHOR AND THE TWO ASSEMBLIES POSITIONED TO PROPER ALIGNMENT PRIOR TO PLACING CONCRETE AROUND 8 WF 17 POST IF CONTRACTOR SO DESIRES.

DETAIL OF TERMINAL ANCHOR POST (TYPE I)

DATE	REVISION	DATE FILM
7-14-10	RAISED HEIGHT OF GUARD RAIL 1"	
6-26-97	REVISED LAP NOTE	
10-18-96	REVISED ASTM REF. TO AASHTO	
11-5-92	DIMENSION TERMINAL DETAIL	
11-11-92	ADDED NOTE FOR PAYMENT	11-11-92
10-1-92	DRAWN & ISSUED	10-1-92

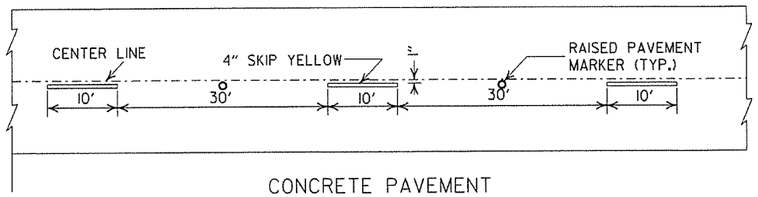
ARKANSAS STATE HIGHWAY COMMISSION

GUARD RAIL DETAILS

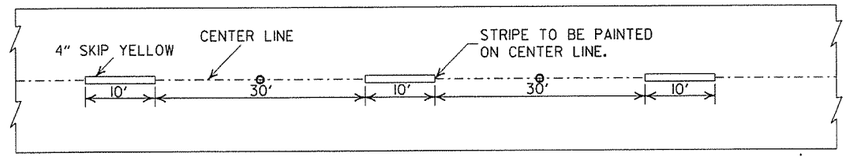
STANDARD DRAWING GRT-1

NOTES:

1. ALL LINES SHALL HAVE A WIDTH OF 4 INCHES.
2. THE THICKNESS AND RATE OF PAINT APPLICATION SHALL BE AS SPECIFIED IN SECTION 718 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
4. RAISED PAVEMENT MARKERS SHALL BE CENTERED BETWEEN SKIP LINES ON 40 FEET SPACING UNLESS OTHERWISE SHOWN ON THE PLANS.

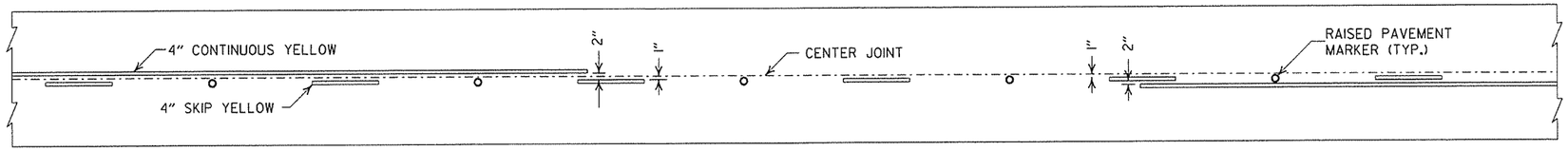


CONCRETE PAVEMENT

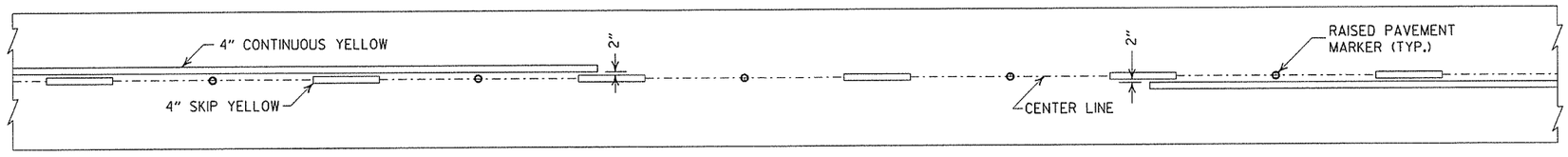


ASPHALT PAVEMENT

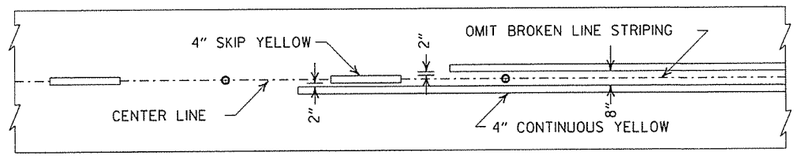
BROKEN LINE STRIPING



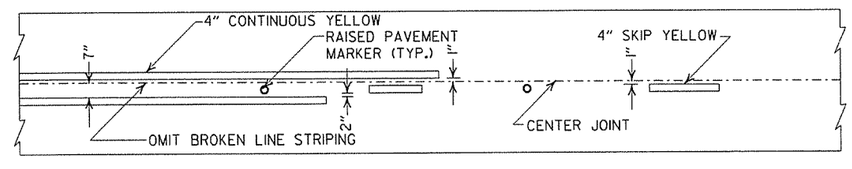
SOLID LINE STRIPING ON CONCRETE PAVEMENT



SOLID LINE STRIPING ON ASPHALT PAVEMENT

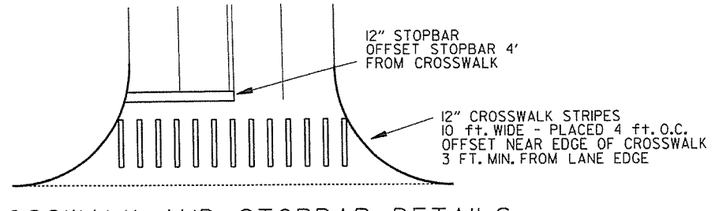


ASPHALT PAVEMENT

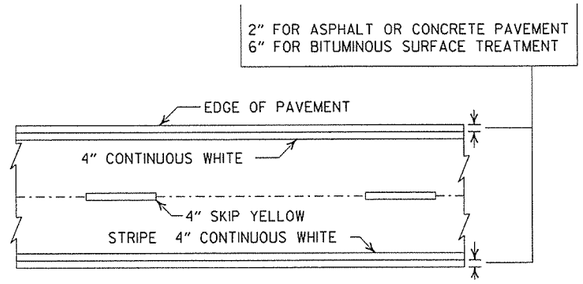


CONCRETE PAVEMENT

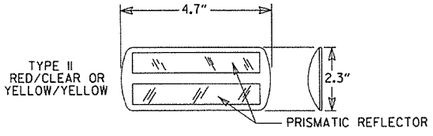
STRIPING AT ADJACENT NO PASSING LANES



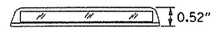
CROSSWALK AND STOPBAR DETAILS



PAVEMENT EDGE LINE MARKING



NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.



DETAIL OF STANDARD RAISED PAVEMENT MARKERS

GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND RAISED PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80

ARKANSAS STATE HIGHWAY COMMISSION

PAVEMENT MARKING DETAILS

STANDARD DRAWING PM-1

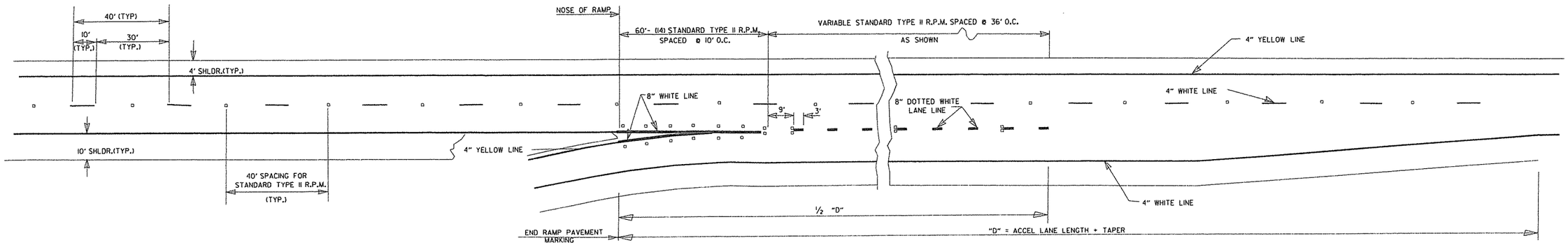
PAVEMENT MARKING QUANTITIES
(BASED ON 700' ACCEL. LANE + 300' TAPER)

ENTRANCE RAMP

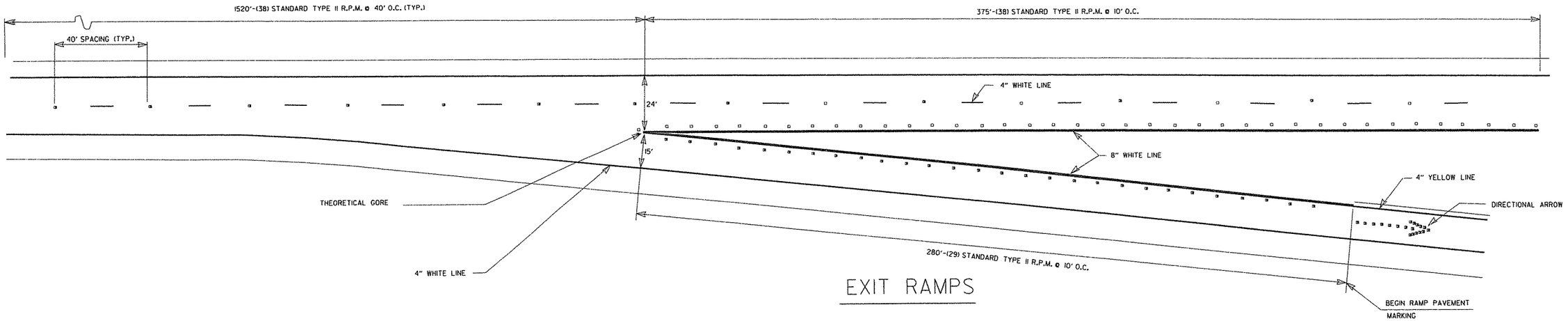
8" WHITE = 228 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH

EXIT RAMP

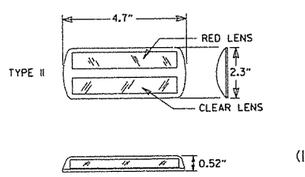
4" WHITE = 280 LIN. FT.
8" WHITE = 655 LIN. FT.
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 48 EACH
RAISED PAVEMENT MARKERS TYPE II (WHITE/RED) = 38 EACH



ENTRANCE RAMPS

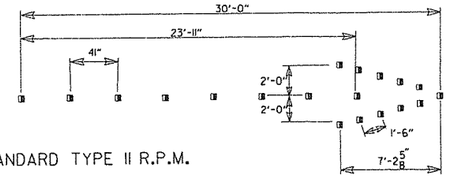


EXIT RAMPS



DETAIL OF
STANDARD
RAISED PAVEMENT MARKERS

NOTE:
THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.



(19) STANDARD TYPE II R.P.M.

DIRECTIONAL ARROWS

GENERAL NOTES:

THIS DRAWING SHOULD BE CONSIDERED AS TYPICAL ONLY AND THE FINAL LOCATION OF THE STRIPING AND PAVEMENT MARKERS SHALL BE DETERMINED BY THE ENGINEER.

THIS DRAWING SHOULD BE USED IN CONJUNCTION WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST REVISION.

NOTE:
DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE AHTD QUALIFIED PRODUCTS LIST.

DATE	REVISION	FILMED
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
7-26-12	REVISED RPM NOTATION	
12-15-11	REVISED RPMs ACCORDING TO LATEST POLICY	
11-17-10	REMOVED PLOWABLE PAVEMENT MARKERS	
6-3-10	REVISED PER 2009 MUTCD	
11-18-04	REVISED NOTES	
8-22-02	ADDED & REVISED NOTES; REV. ENTRANCE & EXIT RAMPS	
5-18-00	REMOVED HASHMARKS	
7-02-98	CHANGED TYPES TO ROMAN NUMERALS	
4-26-96	ADDED DIMENSIONS & QUANTITIES; REVISED LANE WIDTH ON EXIT RAMP	
2-2-95	PLACED IN USE	2-2-95

ARKANSAS STATE HIGHWAY COMMISSION

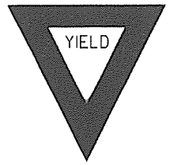
PERMANENT PAVEMENT MARKING ON ACCESS CONTROLLED ROADWAYS

STANDARD DRAWING PM-2

RI-1

STANDARD 30"X30"
EXPRESSWAY 36"X36"
SPECIAL 48"X48"

RI-2



STD. 36"X36"X36"
EXPWY. 48"X48"X48"
FWY. 60"X60"X60"

R2-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5A

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R2-5C

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-1

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

R4-2

STD. 24"X30"
EXPWY. 36"X48"
FWY. 48"X60"

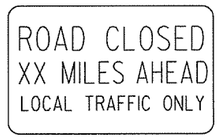
R5-1

STD. 30"X30"
EXPWY. 36"X36"
SPECIAL 48"X48"

RII-2

48"X30"

RII-3A



60"X30"

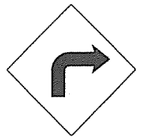
RII-4

60"X30"

RSP-1

48"X30"

WI-1



STD. 36"X36"
FWY. 48"X48"

WI-2

STD. 36"X36"
FWY. 48"X48"

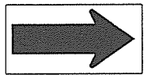
WI-3

STD. 48"X48"

WI-4

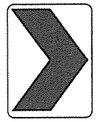
STD. 48"X48"

WI-6



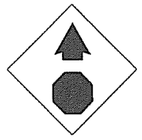
STD. 48"X24"
SPECIAL 60"X30"

WI-8



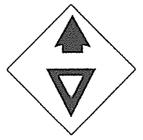
STD. 18"X24"
SPECIAL 24"X30"
EXPWY. 30"X36"
FWY. 36"X48"

W3-1



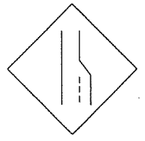
STD. 36"X36"
SPECIAL 48"X48"

W3-2



STD. 36"X36"
SPECIAL 48"X48"

W4-2



STD. 36"X36"
FWY. 48"X48"

W5-1

STD. 36"X36"
SPECIAL 48"X48"

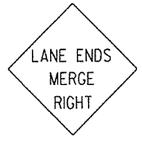
W6-3

EXPWY. 36"X36"
SPECIAL 48"X48"

W8-7

EXPWY. 36"X36"
FWY. 48"X48"

W9-2



STD. 36"X36"
FWY. 48"X48"

WI3-1

STD. 24"X24"

W20-1

STD. 48"X48"

W20-2

STD. 48"X48"

W20-3

STD. 48"X48"

W20-4

STD. 48"X48"

W20-5

STD. 48"X48"

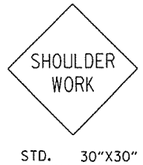
W20-7a

STD. 36"X36"
FWY. 48"X48"

W21-2

STD. 30"X30"
SPECIAL 36"X36"

W21-5



STD. 30"X30"
SPECIAL 36"X36"

W24-1

STD. 36"X36"

WI-4b

STD. 48"X48"

R56-1

STD. 18"X18"

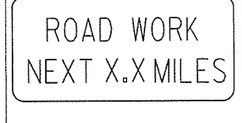
W8-11

STD. 36"X36"
FWY. 48"X48"

W8-9

STD. 36"X36"
FWY. 48"X48"

G20-1



60"X24"

G20-2

48"X24"

OM-3L OM-3R

12"X36"

M4-9

STD. 30"X24"
SPECIAL 48"X36"
SPECIAL 60"X48"

M4-10

48"X18"

R55-1

36"X60"

* USE 6" C LETTERS
** USE 4" D LETTERS

ADVANCE DISTANCES
(XXXX)

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

GENERAL NOTES:

1. 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.
2. 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.
3. 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.
- 4. 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.
- 5. 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.
6. 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.
7. 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.
8. FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
9. 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.
10. 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.

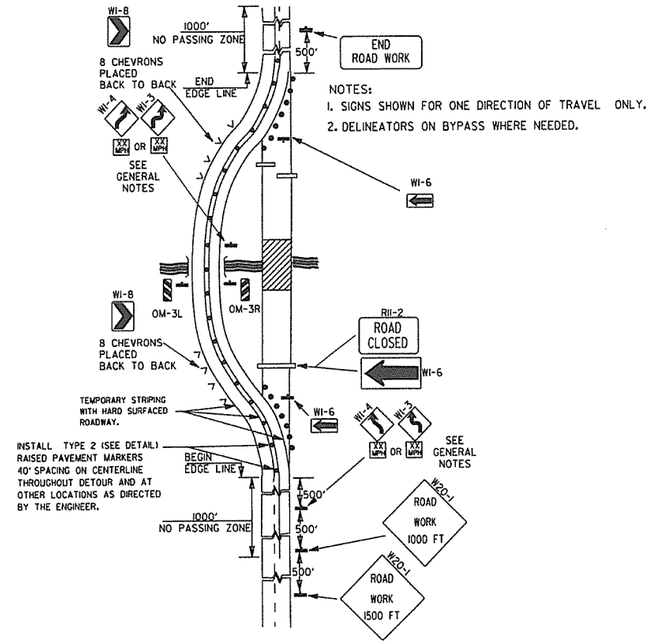
- NOTE: SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED. COMPLIANCE WITH THE REQUIREMENTS OF NCHRP-350 OR MANUAL FOR ASSESSING SAFETY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

DATE	REVISION	FILMED
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

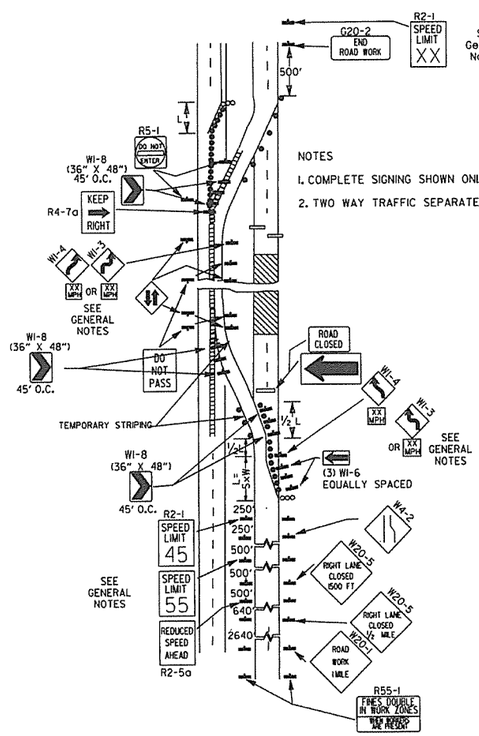
STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

STANDARD DRAWING TC-1



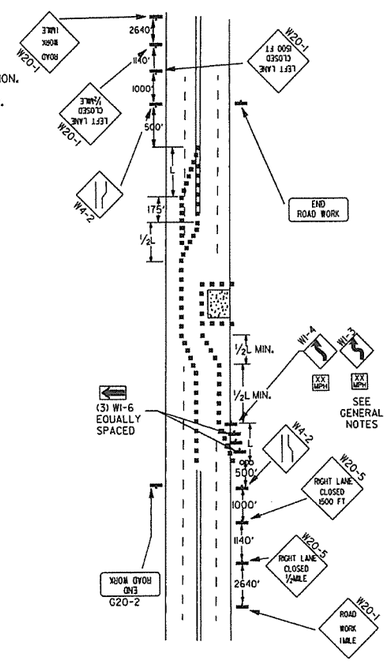
NOTES:
1. SIGNS SHOWN FOR ONE DIRECTION OF TRAVEL ONLY.
2. DELINEATORS ON BYPASS WHERE NEEDED.

(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.

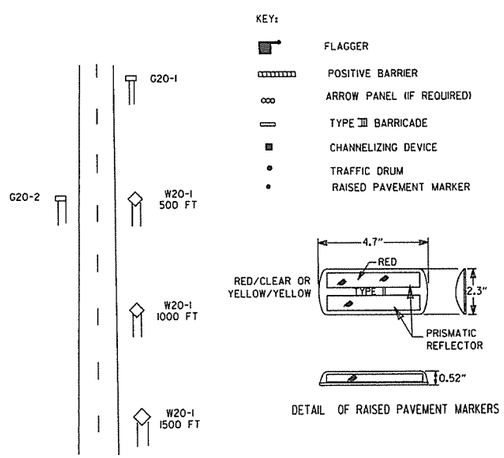


NOTES
1. COMPLETE SIGNING SHOWN ONLY IN CROSSOVER DIRECTION.
2. TWO WAY TRAFFIC SEPARATED WITH POSITIVE BARRIER.

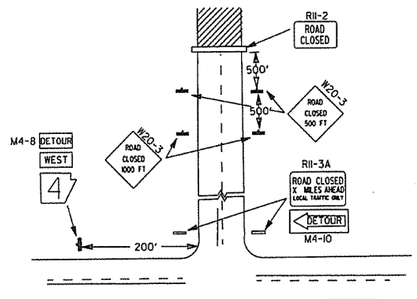
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



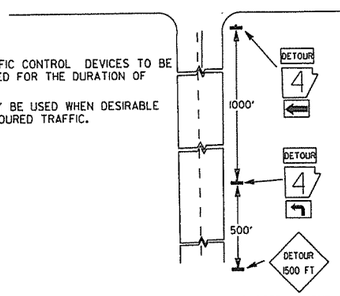
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



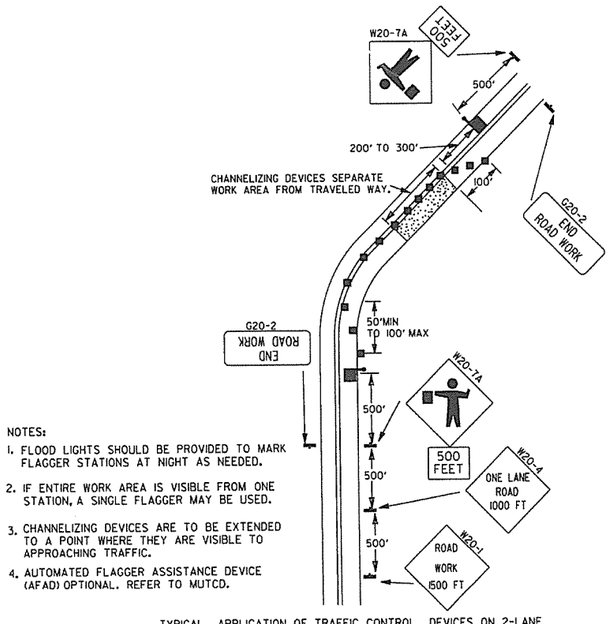
TYPICAL ADVANCE WARNING SIGN PLACEMENT



NOTES:
1. REGULATORY TRAFFIC CONTROL DEVICES TO BE MODIFIED AS NEEDED FOR THE DURATION OF THE DETOUR.
2. STREET NAMES MAY BE USED WHEN DESIRABLE FOR DIRECTING DETOURED TRAFFIC.

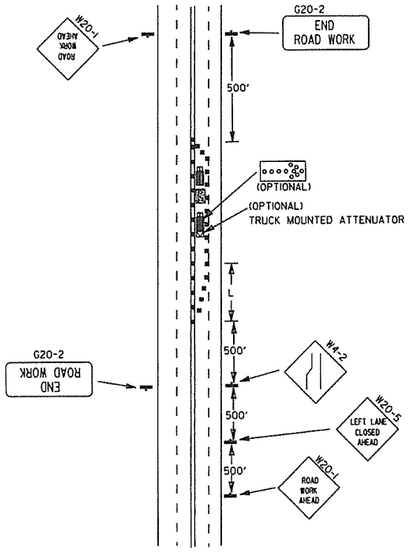


(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.



NOTES:
1. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT AS NEEDED.
2. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
3. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.
4. AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) OPTIONAL. REFER TO MUTCD.

(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.

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:

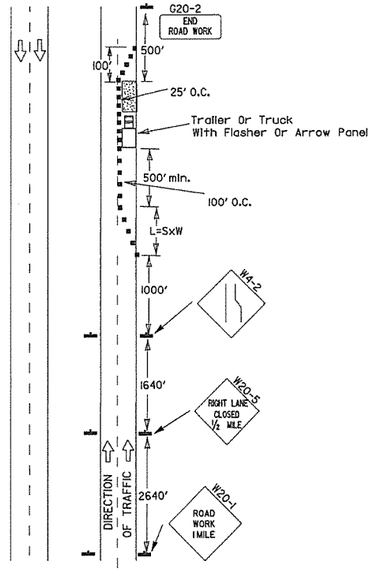
1. ADVISORY SPEED POSTED ON WI-3 OR WI-4 CURVE WARNING SIGNS TO BE DETERMINED AT SITE. USE WI-4 WHEN SPEED IS GREATER THAN 30MPH AND WI-3 WHEN 30MPH OR LESS.
2. WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE R2-5A SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1 45MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(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 R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1 55MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(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 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
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON WI-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

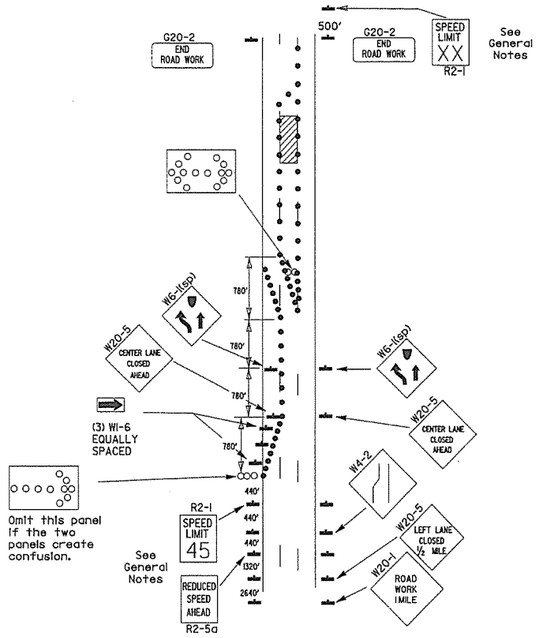
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

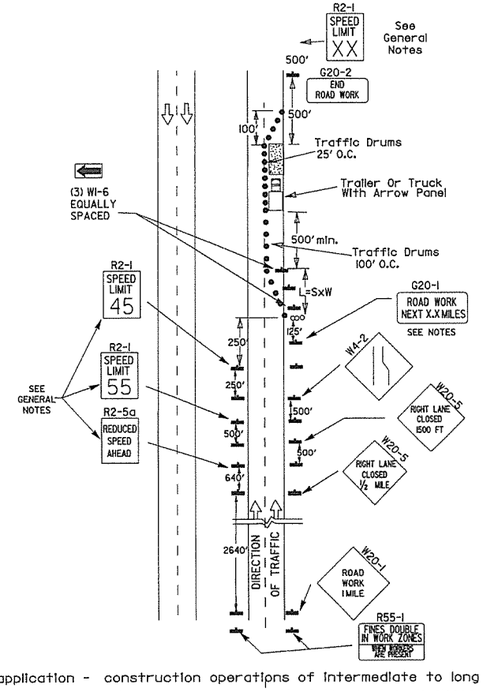
STANDARD DRAWING TC-2



(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.



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

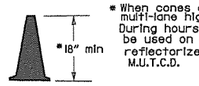
KEY:

- ○○○ Arrow Panel (If Required)
- ■ Channelizing Device
- ● Traffic drum

GENERAL NOTES:

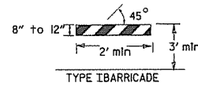
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Division.
2. When the existing speed limit is 55mph and the plans require a speed limit of 45mph, the R2-1(55) shall be omitted and the R2-5A shall be installed at that location. Additional R2-1 45mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(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 R2-1(45) shall be omitted. Additional R2-1 55mph speed limit signs shall be installed at a maximum of 1 mile intervals. At the end of the work area a R2-1(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 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.

Channelizing devices



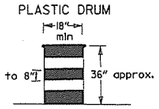
* When cones are used on freeways and multi-lane highways, they shall be 28" min. During hours of darkness, 28" cones shall be used on all roadways, and shall be reflectorized in accordance with the M.U.T.C.D.

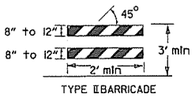
CONES



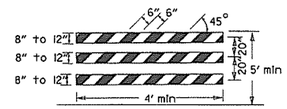
TYPE I BARRICADE

PLASTIC DRUM



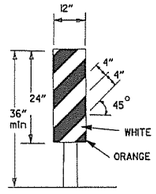


TYPE II BARRICADE



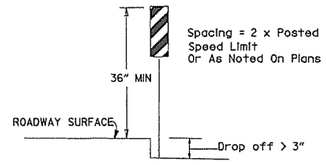
TYPE III BARRICADE

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



VERTICAL PANEL
VP-1R

VERTICAL PANEL PLACEMENT



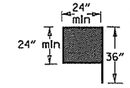
TRAFFIC CONTROL DEVICES
FOR
VERTICAL PAVEMENT DIFFERENTIALS

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-1 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.

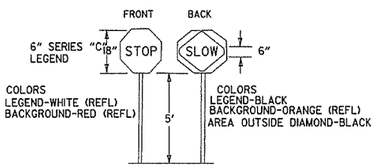
When the shoulder area is used as part of the traveled lane and there is insufficient width to place drums on the remaining shoulder width, then vertical panels shall be used.

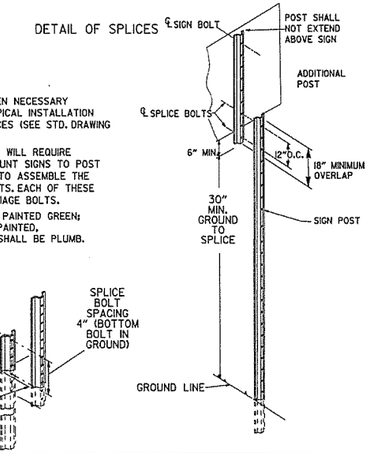
FLAG



Flag shall be of good grade red material

STOP SLOW PADDLE

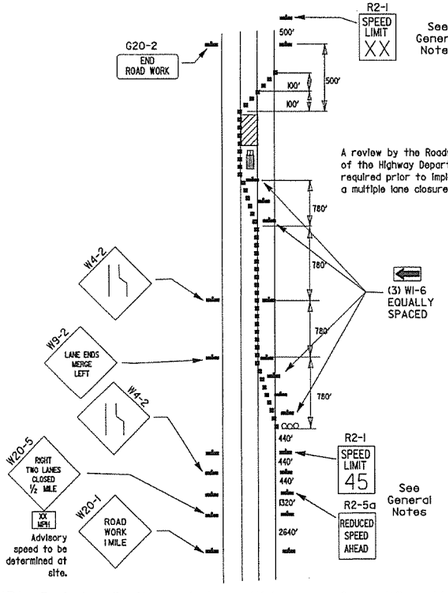




NOTES: USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)

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	

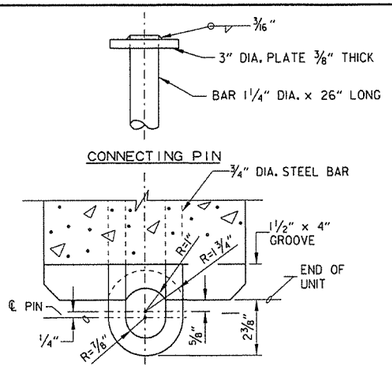
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION

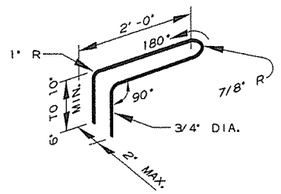
STANDARD DRAWING TC-3

REINFORCING BAR TABLE PER BARRIER UNIT

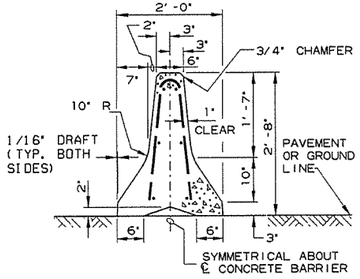
MARK	LOCATION	BAR SIZE	(NO. BARS)	SKETCH
H-1	HORIZONTAL IN BARRIER TIED INSIDE V-1 BARS	#5	(6)	19'-3"
H-2	CENTERED ABOVE DRAIN SLOTS LONG. & TRANSVERSELY	#5	(6)	6'-6"
H-3	TIED ABOVE H-1 BARS TO SUPPORT H-2. TIED TO V-1	#4	(2)	1'-6"
S-1	OVER LIFT HOLES	#4	(2)	2'-5", 90°, 3 3/8" R, LIFTING HOLE
S-2	HORIZ. AROUND SLOTS BETWEEN V-1'S @ DRAIN SLOTS	#4	(2)	1 1/2" R, SLOTS, 7", 1'-6", 1" MIN. CLEAR TO BAR; 5'-1" BAR W/(4) 1 1/2" R BENDS & MIN. 1'-0" OVERLAP
V-1	VERTICAL IN BARRIER(3) EACH END & (2) AT EACH DRAIN SLOTS	#5	(16)	TOTAL LENGTH 4'-9", 2 3/16" R, 12°, 9", 1 1/2", 2'-1 3/8", 4 3/8"



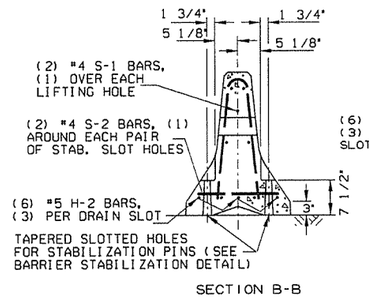
CONNECTION DETAILS



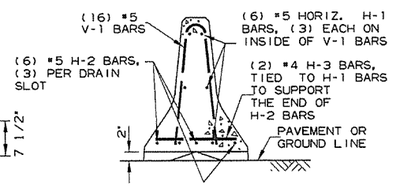
CONNECTION LOOP



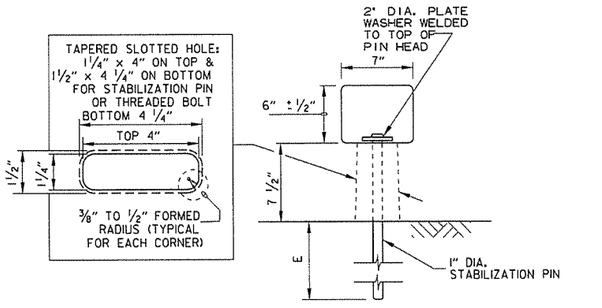
SECTION A-A



SECTION B-B



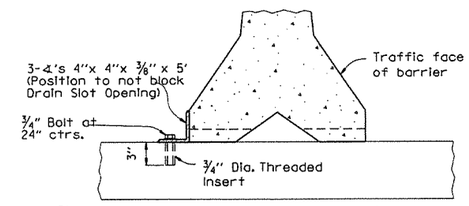
SECTION C-C



BARRIER STABILIZATION DETAIL

ROADWAY SECTION

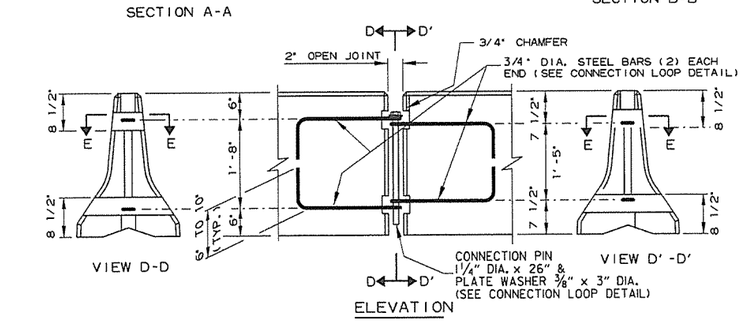
(E) 4" - Concrete Pavement
8" - Asphalt Pavement
12" - Shoulder Areas



NOTE: 3/4" Threaded Inserts shall be cast in place for all new bridge decks and drilled and grouted for existing bridge decks. Inserts shall have a minimum ultimate load capacity of 8000 lbs. in tension. After removal of barrier, bolts, and angles, the Inserts shall be filled with approved non-shrink epoxy.

BARRIER STABILIZATION DETAIL

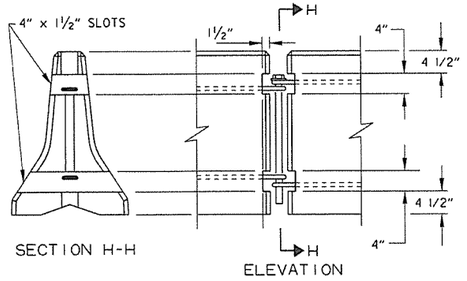
BRIDGE DECKS



VIEW D-D

VIEW D'-D'

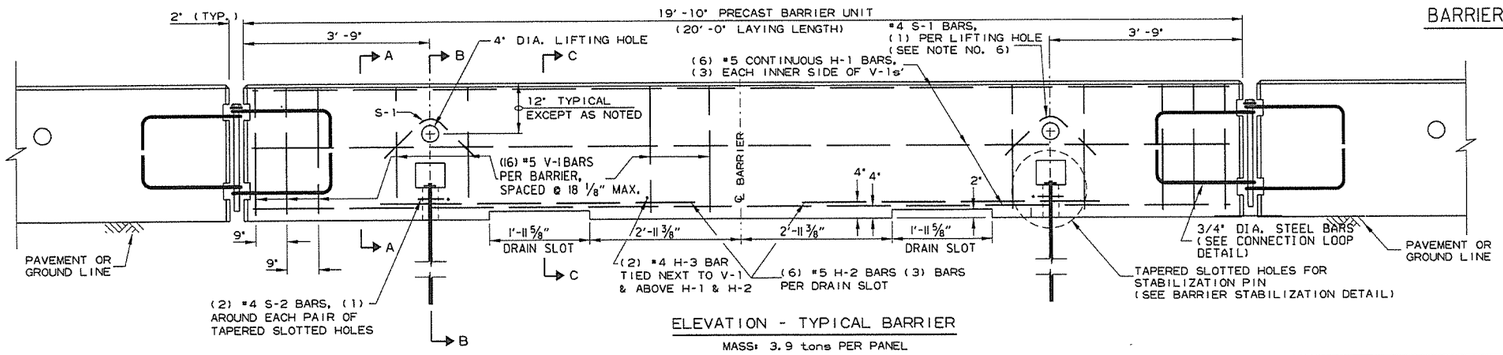
ELEVATION



SECTION H-H

ELEVATION

BARRIER REMOVAL SLOT DETAILS



ELEVATION - TYPICAL BARRIER

MASS: 3.9 tons PER PANEL

General Notes

(1) The contractor shall furnish the Precast Concrete Barrier Units and shall be responsible for the manufacture, shipment, storage, placement and removal. At the completion of the project, the precast units will remain the property of the contractor.

(2) Materials shall meet the following minimum requirements:
Concrete: 2500 psi compressive strength at 28 days.
Reinforcing Steel: AASHTO M 31 or M 53, Grade 60
Structural Steel: AASHTO-M270 Grade 36 shall be used for the Connection Pin, Connection Loops, and Stabilization Pins. A One Piece Pin with a 3" rounded top may be used in place of the detailed Connection Pin.
Delineators: Delineators shall be mounted at 10' spacing on top of precast barrier.

In applications where barrier wall is within 6 feet of a traffic lane, additional delineators shall be placed on the barrier at 10' spacing approximately one (1) foot from the top of the barrier. Delineators shall be on the AHTD Qualified Products List for Construction Concrete Barrier Markers.
Delineator color shall be in accordance with the Manual on Uniform Traffic Control Devices.
Payment for delineators shall be considered included in the price bid per Lin. Ft. for "Furnishing and Installing Precast Concrete Barrier". The contractor shall certify to the Engineer that the material and the design used in the precast barrier units meets the requirements as shown on this standard drawing.

(3) Other Precast Concrete Barriers that have been crash tested and approved by the Federal Highway Administration to meet the requirements of NCHRP-350 test level 3 or Manual For Assessing Safety Hardware (MASH) will be accepted in lieu of the barrier shown. Drain slots shall be provided as needed or as directed by the Engineer. The Contractor shall furnish a certification of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) compliance for any other types of precast barrier to be used. The certification shall state that the precast concrete barrier meets the requirements of NCHRP Report 350 or Manual For Assessing Safety Hardware (MASH) and include a copy of the Federal Highway Administration's (FHWA) approval letter with all attachments. Precast concrete barrier units shall be fabricated and installed in accordance with crash testing and documentation provided in the FHWA approval letter. Mixing of shapes will not be allowed in a continuous line of units.

(4) Dowel holes in pavement or bridge slabs that are to remain in place shall be filled. Holes in concrete pavement and bridge slabs shall be filled with an approved non-shrink epoxy grout. Holes in asphalt pavement shall be filled with an approved asphalt joint filler. Payment for drilling and filling holes to be included in the price for various barrier items.

(5) Attach Units To Roadway Surface with Stabilization Pins and to Deck Slabs using bolts when required.

(6) A 4" White PVC Sleeve may be used to form the Lifting Hole and if used the Sleeve is to be left in place.

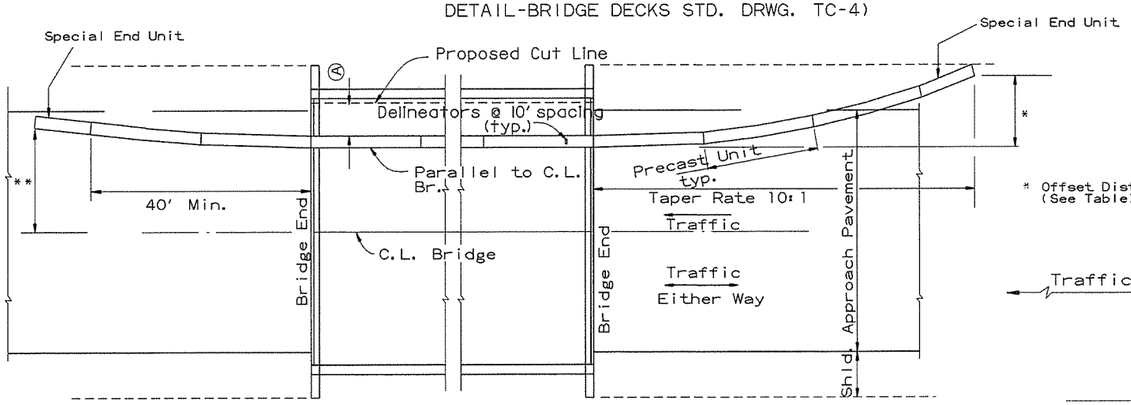
DATE	REVISION	FILMED
2-27-14	REVISED BARRIER STABILIZATION DETAIL	
10-15-09	ADDED REFERENCE TO MASH	
8-5-09	REV. NOTE 3 CONCERNING DRAIN SLOTS	
11-29-07	REVISED NOTE 3	
5-25-06	DELETED GENERAL NOTE 7	
11-18-04	REVISED BARRIER STABILIZATION DETAIL BRIDGE DECKS	
4-10-03	REVISED GENERAL NOTE 2	
8-22-02	ISSUED NEW DRAWING	

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

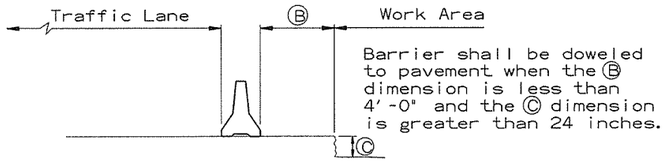
STANDARD DRAWING TC-4

Ⓐ 4 feet or greater preferred. If less than 4 feet, Precast Units shall be connected to slab (SEE BARRIER STABILIZATION DETAIL-BRIDGE DECKS STD. DRWG. TC-4)



BARRIER PLACEMENT ALONG BRIDGE WITH OFFSET

No Scale

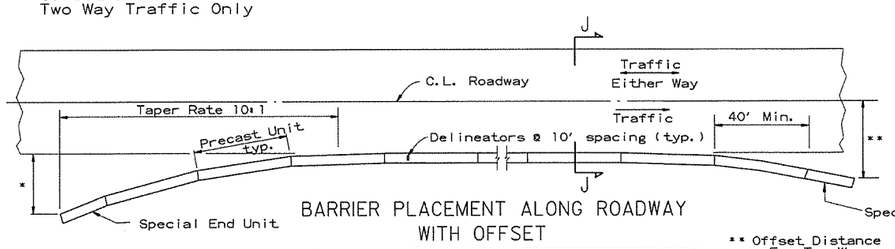


Barrier shall be doweled to pavement when the Ⓑ dimension is less than 4'-0" and the Ⓒ dimension is greater than 24 inches.

SECTION J-J

No Scale

** Offset Distance for Two Way Traffic Only



BARRIER PLACEMENT ALONG ROADWAY WITH OFFSET

No Scale

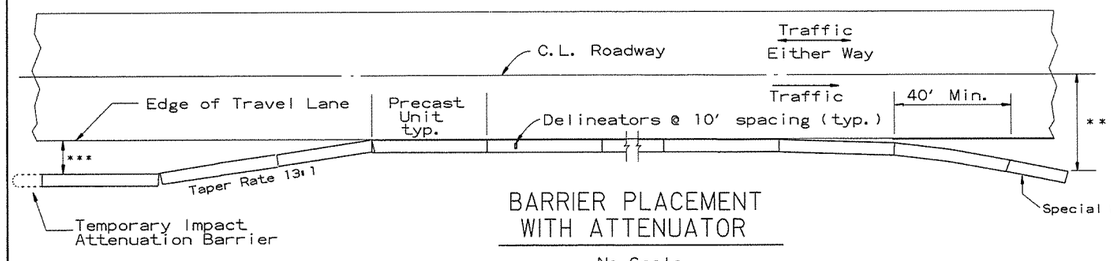
** Offset Distance For Two Way Traffic Only

* Offset Distance (See Table)

Offset Distance Table

Speed (MPH)	Offset Distance (FT.)
≤ 45	12
> 45	18

If offset distance is not attainable, then see 'Barrier Placement With Attenuator' Detail shown below.

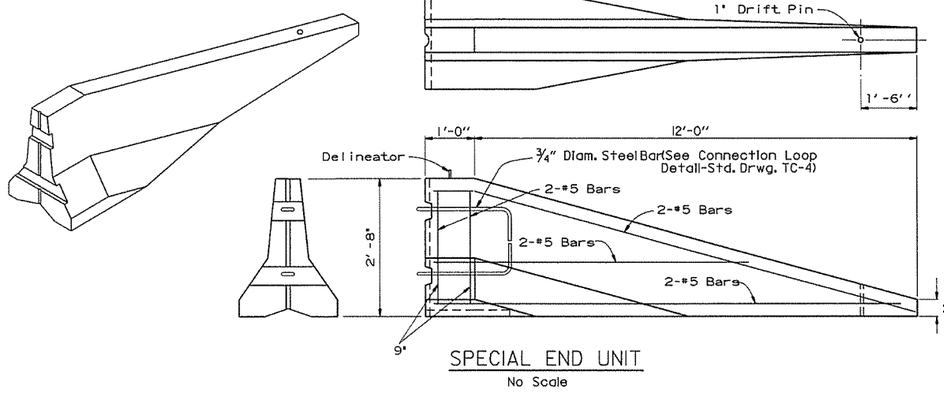


BARRIER PLACEMENT WITH ATTENUATOR

No Scale

** Offset Distance For Two Way Traffic Only

***Min. 3'-0" From Edge of Travel Lane to Nearest Edge of Attenuator



SPECIAL END UNIT

No Scale

General Notes

When shown on the Plans, the ends of the Temporary Precast Concrete Barrier shall be protected with an NCHRP-350 or Manual For Assessing Safety Hardware (MASH) approved Crash Cushion. Payment for Crash Cushions shall be made under the item of "Temporary Impact Attenuation Barrier."

DATE	REVISION	FILMED
10-15-09	ADDED REFERENCE TO MASH	
5-25-06	REVISED BARRIER PLACEMENT	
8-22-02	ISSUED NEW DRAWING	

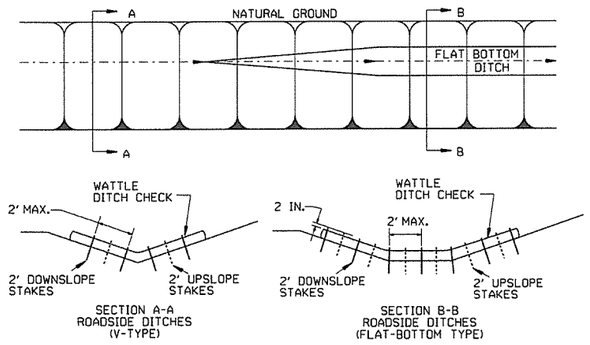
ARKANSAS STATE HIGHWAY COMMISSION

STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION - TEMPORARY PRECAST BARRIER

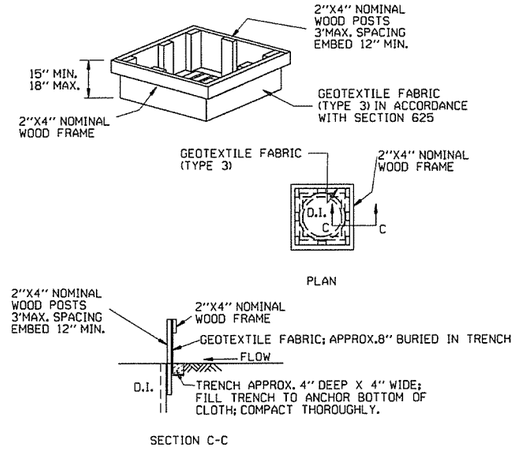
STANDARD DRAWING TC-5

GENERAL NOTES

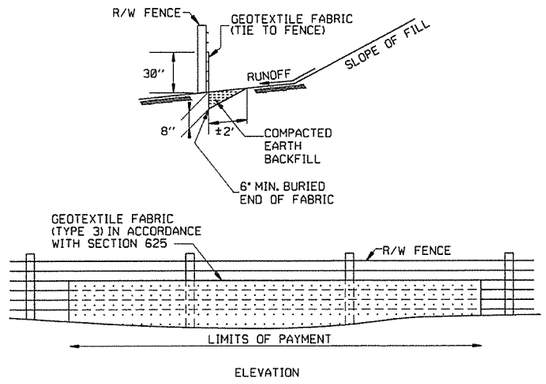
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.



WATTLE DITCH CHECK (E-1)



DROP INLET SILT FENCE (E-7)



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

GENERAL NOTES

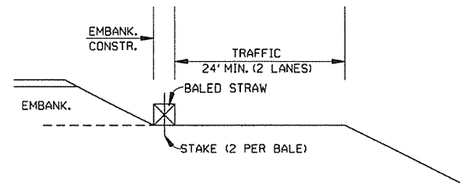
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST, OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

GENERAL NOTES

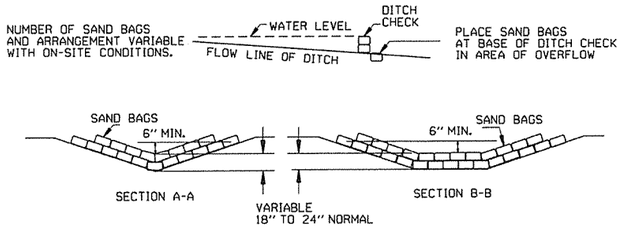
1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.

2. NO GAPS SHALL BE LEFT BETWEEN BALES.

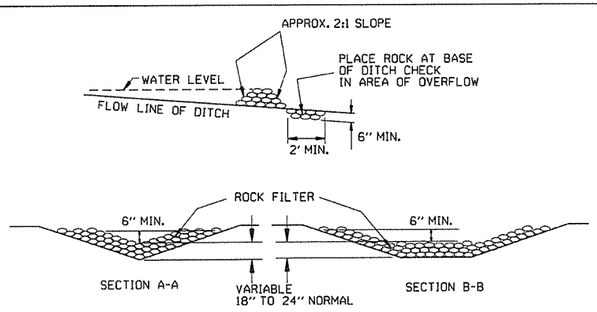
3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



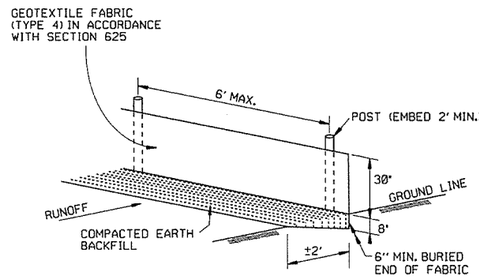
BALED STRAW FILTER BARRIER (E-2)



SAND BAG DITCH CHECK (E-5)



ROCK DITCH CHECK (E-6)



SILT FENCE (E-11)

GENERAL NOTES

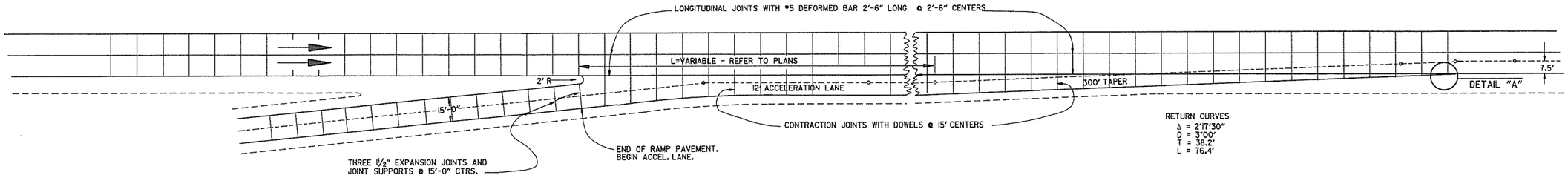
GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.

DATE	REVISION	FILMED
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
11-18-98	ADDED NOTES	
7-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
7-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
7-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
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

ARKANSAS STATE HIGHWAY COMMISSION

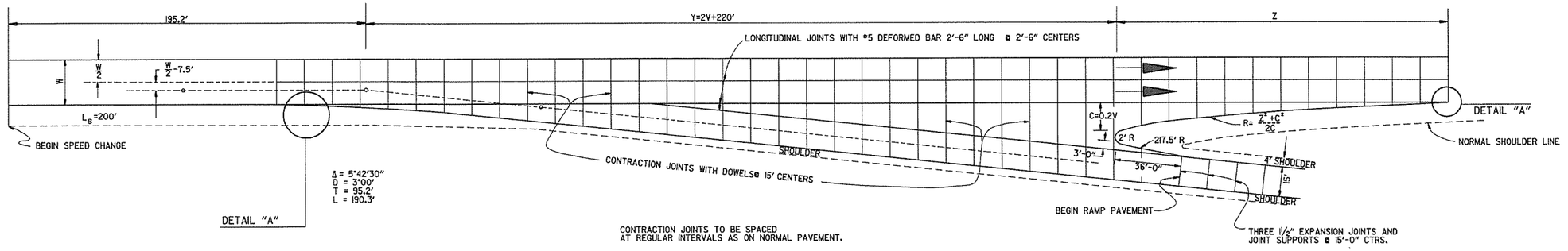
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-1



ENTRANCE RAMP

NOTE: JOINT SPACING ON THE MAIN LANES SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO THESE JOINT LAYOUTS. THE MAIN LANE JOINT SPACING MAY BE REDUCED TO A 12' MINIMUM.

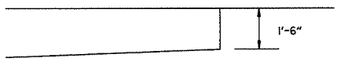


CONTRACTION JOINTS TO BE SPACED AT REGULAR INTERVALS AS ON NORMAL PAVEMENT.

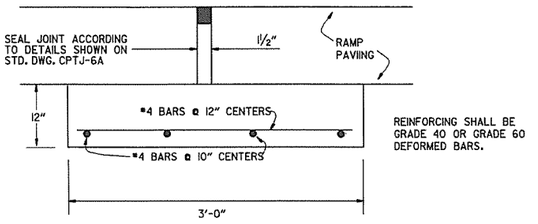
EXIT RAMP

EXIT RAMP

DESIGN SPEED V	Y	NOSE OFFSET C	LENGTH NOSE TAPER Z	RETURN RADIUS R	ADDITIONAL SURFACING SQ. YDS.
40	300.0	8.0	96.0	580.0	602.43
50	320.0	10.0	120.0	725.0	687.29
60	340.0	12.0	168.0	1182.0	790.55
70	360.0	14.0	210.0	1582.0	902.27



DETAIL "A"



DETAIL OF EXPANSION JOINT & JOINT SUPPORT

NOTE: THE EXPANSION JOINTS SHALL BE MEASURED AND PAID FOR AS P.C.C. PAVEMENT (RAMP THICKNESS). WHEN RAMP PAVING IS ASPHALT, EXPANSION JOINT IS NOT REQUIRED.
THE JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A", "S", OR PAVING CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT UNIT PRICE BID FOR THE CLASS OF CONCRETE USED. ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE BID FOR THE ABOVE ITEMS.

DATE	REVISION	DATE FILM'D
8-22-02	DELETED NOTE	
11-16-01	CORRECTED SPELLING ON ENTRANCE RAMP NOTE	
5-13-99	ADDED, EDITED AND DELETED NOTES	
11-03-94	ADDED NOTE RE: REINF. BARS	
10-1-92	ADDED DETAIL A & OTHER MINOR CHANGES	10-1-92
1-25-90	REVISED EXPANSION JOINT	1-25-90
7-15-88	CONFORM'D TO 1988 SPECIFICATIONS	65C-7-15-88
3-2-81	ISSUED	511-10-2-72

ARKANSAS STATE HIGHWAY COMMISSION

DETAILS OF STANDARD TURNOUT FOR ENTRANCE & EXIT RAMPS (NON-REINFORCED)

STANDARD DRAWING TR-1A