INDEX OF SHEETS

NO. 6

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9. SUMMARY OF TRAFFIC SIGNAL QUANTITIES
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12. SIGNALIZATION PLAN SHEETS
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ROADWAY STANDARD DRAWINGS

DRN| NO. | TITLE | DATE
---|-----|-------|-------
CDD-1 | CONCRETE DITCH PAVING | 12-08-10
CDG-1 | CURBING DETAILS | 11-26-07
DA-1 | DETAILS OF GROoves & ISLANDS | 12-07-14
FA-1 | LANE END DETAIL | 10-18-98
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PFB-2 | DETAILS OF DROP INLET | 9-22-02
PFB-3 | DETAILS OF DROP INLET | 9-22-02
PFB4 | DETAILS OF DROP INLET (TYPE A) | 9-22-02
PFB4 | DETAILS OF DROP INLET (TYPE B) | 9-22-02
PGC-1 | CONCRETE PIPE CULVERT (FILL HEIGHT & SLOPE) | 2-27-14
PGP-1 | PLASTIC PIPE CULVERT (HIGH DENSITY POLYETHYLENE) | 2-27-14
PGP-2 | PLASTIC PIPE CULVERT (PVC) | 2-27-14
PJ-1 | PAVEMENT MARKING DETAIL | 9-18-17
PJ-2 | DETAILS OF PAVEMENT UNDERGROUND | 9-18-17
SD-1 | COWL COLLAR & UTILITY DRAWERS | 9-12-13
SD-2 | HEAVY DUTY PULL BOXES | 9-12-13
SD-3 | HEAD PLACEMENT | 12-08-10
SD-4 | SERVICE PORT | 11-17-11
SD-5 | STEEL POLE WITH WATT ARM | 11-17-17
B-1 | DETAIL OF SPECIAL ITEMS | 9-12-13
TC-1 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 4-13-17
TC-2 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 9-22-15
TC-3 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 9-22-15
TEC1 | TEMPORARY EROSION CONTROL DEVICES | 11-16-17
TEC2 | TEMPORARY EROSION CONTROL DEVICES | 5-8-84
VE-1 | WELL DRAINAGE RAPIDS NEW CONSTRUCTION AND ALTERATIONS | 11-05-07

GENERAL NOTES

1. GRADE LINE DENOTES FINISHED GRADE WHERE SHOWN ON PLANS.
2. ALL PIPE SIZES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR LOWERED BY THE RESPECTIVE OWNERS AFTER AGREEMENT WITH SUCH OWNERS.
3. AMOUNTS OF AMOUNT OF MATERIALS THAT INTERSECTS WITH THE PROPOSED CONSTRUCTION AND WHICH MAY BE THE PROPERTY OF UTILITY SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNER UNLESS OTHERWISE PROVIDED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ANY MAJOR caches WITHIN THE PROJECT LIMITS IN SUCH A MANNER THAT THE PUBLIC MAY BE SERVED CONTINUOUSLY. SERVICE, PAYMENT WILL BE CONSIDERED INCLUDED IN THE PRICE BUT FOR THE VARIOUS SIG ITEMS.
5. ALL LANE WORKS LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 3.10 OF THE STANDARD SPECIFICATIONS.
6. ALL TREES THAT DO NOT DIRECTLY INTERSECT WITH THE PROPOSED CONSTRUCTION SHALL BE PRUNED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INCREASE THAT ALL TREES NOT TO BE REMOVED SHALL BE HELD AS IT IS AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A STAKE TO CONTROL LIVESTOCK IN AREAS WHERE MATTER WANTS TO BE REMOVED. WHEN ENOUGH CONSTRUCTION WORKS TO BE REMOVED, THE CONTRACTOR MAY ELECT TO PROVIDE TEMPORARY FENCING SUITABLE TO CONTAIN LIVESTOCK.
8. ALL ELEVATED BASALT AND ASPHALT DEPOSITS REMOVED SHALL BE PRODUCED FOR UNDER THE ITEM NO. 100 - UNDECRATED DISCAR.
TYPICAL SECTION OF IMPROVEMENT
HWY. 102B
NOTCH & WIDENING
STA. 71+29.00 TO STA. 78+36.00

TYPICAL SECTION NOTES:

1. REFER TO CROSS SECTIONS FOR DEVIATIONS FROM THE NORMAL SLOPES. NO CHANGES SHALL BE MADE FROM THE PLANNED SLOPES WITHOUT THE APPROVAL OF THE ENGINEER.

2. THE THICKNESS OF AGGREGATE BASE COURSE SHALL BE WITHIN PLUS OR MINUS ONE INCH OF THE PLANNED THICKNESS SHOWN THE CONTRACTOR WILL CORRECT ANY DEFICIENT THICKNESS THAT DOES NOT MEET TOLERANCE INDICATED.

3. PRIOR TO AND DURING PLACEMENT OF PAVEMENT, THE CONTRACTOR SHALL PROVIDE POSITIVE DRAGBAR AT ALL TIMES. THE METHODS USED SHALL BE APPROVED BY THE ENGINEER. THE CONTRACTOR'S WORK SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE VARIOUS CONTRACT ITEMS.

4. ASPHALT FOR LEVELING OF EXISTING PAVEMENT SHALL BE PLACED ONLY IF AND WHERE DIRECTED BY THE ENGINEER. THE CONTRACTOR'S WORK SHALL NOT BE PAID FOR DIRECTLY. ALL PAYMENT WILL BE CONSIDERED INCLUDED IN THE VARIOUS PAY ITEMS.

5. THE FINAL INCH OF SURFACE COURSE IS TO BE PLACED AFTER ALL OTHER COURSES HAVE BEEN LAID. CONDITIONAL JOINTS SHALL BE AT 24 INCHES.

6. 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 BLOWN FREE FROM DUST IN A MANNER THAT WILL NOT DAMAGE THE PAVEMENT THAT IS TO REMAIN IN PLACE. THE REMOVED PAVEMENT THAT IS TO REMAIN IN PLACE SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE.

7. TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE WALKS AT 40 INTERVALS.

TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER

PLAN NO. 51-04
SHEET NO. 1

MAKING USE OF MATERIALS AND WORKMANSHIP NOT OTHERWISE SPECIFIED.

---

TYPICAL SECTIONS OF IMPROVEMENT
SEBA ROAD & TOWN VU ROAD
SIDEWALK

STA. 68+90.29 TO STA. 71+29.00

TYPICAL SECTIONS OF IMPROVEMENT

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER

PLAN NO. 51-04
SHEET NO. 2

MAKING USE OF MATERIALS AND WORKMANSHIP NOT OTHERWISE SPECIFIED.
DROP INLET TYPE RM SPECIAL

NOTES:
1. DROP INLET SHALL CONFORM TO APPLICABLE GENERAL NOTES FROM STANDARD DRAWING FPC-90.
2. SEE STANDARD DRAWING FPC-9M FOR DETAILS OF HEAVY DUTY RING AND COVER.
3. SEE STD. DRAWING FPC-9D FOR REINFORCING DETAILS OF WALLS AND BOTTOM.
4. PAYMENT FOR DROP INLET SHALL BE MADE UNDER "DROP INLET (TYPE RM SPECIAL)."

RINTING AND LID DIAGONAL BARS
- CORNER BARS - SAME SIZE AND SPACING AS HORIZONTAL BARS
- L" BAR CORNER BAR

HEAVY DUTY RING AND COVER
- 6" DIA. CORNER COLUMN (TYP.)
- 6" MIN. OPENING, 4 SIDES
- TOP SLAB STEEL #6 @ 6" BOTH WAYS
- WALL REBARS: SEE STD. DRAWING FPC-9D FOR REINFORCING DETAILS OF WALLS AND BOTTOM

SECTION "A" - "A"
SEE STANDARD DRAWING FPC-9D FOR "T" AND "W"

SECTION "B" - "B"

PICTORIAL VIEW

PLAN

DETAIL FOR SOLID SODDING AROUND DROP INLETS
A = 7'-0"

SOLID SODDING

CONCRETE DITCH PAVING (TYPE SPECIAL)

BACK OF CURB

"C" BARS # 10 CHL. SIDE WALLS

"B" BARS # 10 CHL. TOP & BOTTOM SLAB

"D" BARS # 10 CHL. TOP & BOTTOM SLAB

TOP VIEW

CONCRETE DITCH PAVING

SOLID SODDING

TOP OF CURB

DROP INLET (TYPE SPECIAL)

SPECIAL DETAILS

ARKANSAS

REGISTERED PROFESSIONAL

GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL REINF. BARS SHALL BE #4 AND HAVE 1 1/4" COVER
3. DROP INLETS AND EXTENSIONS ON CURVED SECTIONS SHALL CONFORM TO THE CURVATURE OF THE CURB
4. DURING CONSTRUCTION OF THE ROADWAY, THE CONTRACTOR SHALL MAINTAIN DRAKEAGE (SOIL OR GRAVEL) AROUND THE DROP INLET AS APPROVED BY THE ENGINEER
5. PAYMENT FOR CURB AND/OR CURB AND GUTTER WITHIN THE LIMITS OF DROP INLETS AND DROP INLET EXTENSIONS SHALL BE PAID FOR SEPARATELY
6. CONCRETE DITCH PAVING & SOLID SODDING SHALL BE PAID FOR SEPARATELY
7. CONSTRUCT EXTENSION UPTREE OF SOLID SODDING UNTIL OTHERWISE SPECIFIED

SECTION A-A - EXTENSION

TOP VIEW - EXTENSION

FRONT VIEW - EXTENSION
Concrete Retaining Wall Special Detail

Max Height 3'-0"
STAGE 1 CONSTRUCTION SEQUENCE:

INSTALL ADVANCE WARNING SIGNS AND END ROAD WORK SIGNS AS SHOWN ON MAINTENANCE OF TRAFFIC ADVANCE WARNING SHEET. APPLY CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE MAINTENANCE OF TRAFFIC DETAILS. CONSTRUCT CROSSROAD DRAINAGE ON HWY.#20 SOUTH OF THE INTERSECTION AND ALONG SOUTH SIDE SEBA ROAD AND TOWN #2 ROAD. CONSTRUCT WIDENING, CURB, AND GUTTER, SIDEWALKS, DRAINAGE STRUCTURES, AND TRAFFIC SIGNALS AS SHOWN IN HATCHED AREAS.

STAGE 2 CONSTRUCTION SEQUENCE:

MAINTAIN ADVANCE WARNING SIGNS PLACED IN STAGE 1. APPLY CONSTRUCTION PAVEMENT MARKINGS AS SHOWN IN THE STAGE 2 MAINTENANCE OF TRAFFIC DETAILS, AND REMOVE CONFLICTING MARKINGS.

CONSTRUCT WIDENING, CURB AND GUTTER, SIDEWALKS, DRAINAGE STRUCTURES, AND TRAFFIC SIGNALS AS SHOWN IN HATCHED AREAS.

DO NOT PASS (2) BUMP (48" X 48")
(2) R4-1 (24" X 30")
(2) K20-5A (36" X 56")

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

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

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

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

TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.

ALL STAGES TO BE USED IF AND WHERE DIRECTED BY THE ENGINEER.
STAGE I CONSTRUCTION SEQUENCE:
- Install advance warning signs and end road work signs as shown on maintenance of traffic advance warning sheet.
- Apply construction pavement markings as shown in the stage, maintenance of traffic details.
- Construct crossroad drainage on Hwy. 02B south of the intersection and along south side Seba Road and Town Vu Road.
- Construct median, curb and gutter, sidewalks, drainage structures, and traffic signals as shown in hatched areas.

STAGE I QUANTITIES:
- VERTICAL PANELS = 9 EACH
- SIGNS = 288 SQ. FT.
- TRAFFIC DRUMS = 35 EACH
- CONSTRUCTION PAVEMENT MARKINGS = 1550 L/FT.

STAGE I MAINTENANCE OF TRAFFIC DETAILS

- STA. 68+20.00 C.L.
- STA. 75+00.00 C.L.
- Seba Road and Town Vu Rd.
- \[ \Delta = 89'50" \]
<table>
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<tr>
<th>Station</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>20+00.00</td>
<td>HWY. 1028</td>
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<tr>
<td>75+00.00</td>
<td>C.L., SEBA RD., AND TOWN VU RD.</td>
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<tr>
<td>Δ = 89°50'31&quot;</td>
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</table>

**Traffic Details:(STAGE 1, MAINTENANCE OF TRAFFIC DETAILS)**

- Traffic Drums 35' Spacing (TYP.)
- 4" DBL. YELLOW CONSTRUCTION PAVEMENT MARKING
- 4" WHITE CONSTRUCTION PAVEMENT MARKING
- 4" DBL YELLOW CONSTRUCTION PAVEMENT MARKING

**Construction Details:**

- STA. 28+52.64 END TOWN VU ROAD CONSTRUCTION

**Location:**

- S. 69°34'51" E
- S. 69°30'10" E
STAGE 2 CONSTRUCTION SEQUENCE:

1. Maintain advance warning signs placed in STAGE 1.
2. Apply construction pavement markings as shown in the STAGE 2 maintenance of traffic details and remove any conflicting markings.
3. Construct medians, curb and gutter sidewalks, drainage structures, and traffic signals as shown in hatched areas.

STAGE 2 QUANTITIES:

- Signs = 288 sq. ft.
- Traffic drums = 28 each
- Construction pavement markings = 946 lin. ft.

TRAFFIC DRUMS (30' SPACING TYP.)

STAGE 2 MAINTENANCE OF TRAFFIC DETAILS

STA. 68+90.29
BEGIN JOB 0900271
LOG MILE 0.00

TRAFFIC DRUMS (30' SPACING TYP.)

STA. 70+00.00 C.L., HWY. 1028 =

STA. 75+00.00 C.L., SEBA RD. AND TOWN VU RD.

TRAFFIC DRUMS (30' SPACING TYP.)

STA. 20+00.00 C.L., HWY. 1028 =

STA. 75+00.00 C.L., SEBA RD. AND TOWN VU RD.

TRAFFIC DRUMS (30' SPACING TYP.)

STA. 76+80.00 C.L., HWY. 1028 =

STA. 75+00.00 C.L., SEBA RD. AND TOWN VU RD.

TRAFFIC DRUMS (30' SPACING TYP.)

STA. 77+80.00 C.L., HWY. 1028 =

STA. 78+36.00 END JOB 0900271
LOG MILE 1.06

CONSTRUCTION STAGE 2

TRAFFIC DRUMS (30' SPACING TYP.)

WHITE CONSTRUCTION PAVEMENT MARKING

DOUBLE YELLOW CONSTRUCTION PAVEMENT MARKING
STAGE 2 MAINTENANCE OF TRAFFIC DETAILS

CONSTRUCTION STAGE 2

STA. 20+20.00 CL. HWY 102B:
STA. 27+40.00 CL. SSEA RD. AND TOWN VU RD.:
\[ \Delta = 90^\circ 00' 26'' \]

STAGE 2 END TOWN VU ROAD CONSTRUCTION

STA. 28+52.64
PERMANENT PAVEMENT MARKING DETAILS

THERMOPLASTIC PAVEMENT MARKINGS:
- 6" YELLO" SOLID LINE = 3602 LIN. FT.
- 6" WHITE SOLID LINE = 834 LIN. FT.
- 12" WHITE SOLID LINE = 663 LIN. FT.

REFLECTORIZED PAINT PAVEMENT MARKINGS:
- ARROWS: 6 EACH
- WORDS: 2 EACH

RAISED PAVEMENT MARKERS (80' O.C.):
- TYPE II (YELLOW/YELLOW) = 23 EACH
- TYPE II (WHITE/RED) = 9 EACH

NOTE: ALL CONFLICTING EXISTING PAVEMENT MARKINGS ARE TO BE REMOVED.

STA. 69+00.00 C.L. HWY. 102B
- 6" WHITE SOLID LINE
- TAPER = 41'

STA. 71+00.00 C.L. HWY. 102B
- 6" BRUSHED WHITE SOLID LINE
- 6" WHITE STOP LINE

STA. 75+00.00 C.L. SEBA RD. AND TOWN RD.
- 6" WHITE SOLID LINE
- TAPER = 44'
- 6" WHITE STOP LINE

STA. 78+36.00 END JOB 090471
- 5" WHITE SOLID LINE

NOTE:
- ALL CONFLICTING EXISTING PAVEMENT MARKINGS ARE TO BE REMOVED.
### Advance Warning Signs and Devices

<table>
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<tr>
<th>Sign Number</th>
<th>Description</th>
<th>Size</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Maximum Number Required</th>
<th>Total Signs Required</th>
<th>Vertical Panels</th>
<th>Traffic Drums</th>
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<td>Road Work, 1200 ft.</td>
<td>48&quot;x48&quot;</td>
<td>4</td>
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<td>W2-1</td>
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<td>W2-1</td>
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<td>W2-1A</td>
<td>Right Shoulder Closed</td>
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**Total:** 328.5

### Construction Pavement Markings and Permanent Pavement Markings

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<th>End of Job</th>
<th>Removal of Construction Pavement Markings</th>
<th>Removal of Permanent Pavement Markings</th>
<th>Removal of Permanent Pavement Markings Arrows</th>
<th>Raised Pavement Markers, Type II (White/Red)</th>
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**Total:** 2496

### Clearing and Grubbing

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### Earthwork

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**Total:** 727

**Note:** Earthwork quantities shown above shall be paid as plan quantity.
TOTALS: 415.34 44.62
TOTALS: 49.8 4.3
### PAVEMENT REPAIR OVER CULVERTS (ASPHALT)

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### ASPHALT CONCRETE PATCHING FOR MAINTENANCE OF TRAFFIC

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**TOTALS:** 0.40 TON

### DRIVEWAYS & TURNOUTS

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<th>LOCATION</th>
<th>WIDTH</th>
<th>MODIFIED Curb</th>
<th>PORTLAND CEMENT CONCRETE DRIVeway</th>
<th>ACMI SURFACE COURSE (1/2&quot;) 220 Lbs. per SQ. YD. (PO 64-22)</th>
<th>AGGREGATE BASE COURSE (CLASS 7)</th>
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**TOTALS:**

### COLD MILLING ASPHALT PAVEMENT

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<td>50+00</td>
<td>HWY. 102B</td>
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<td>19.17 GAL./SQ. YD.</td>
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**TOTALS:** 631 TON

### CONCRETE COMBINATION CURB AND GUTTER (TYPE A)

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**TOTALS:** 1798 TON

### CONCRETE DITCH PAVING

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**TOTALS:** 28.00 42.00 2.00 6.00 12.00 0.16

**BASIS OF ESTIMATE:**

**WATER:** 12.6 GAL./SQ. YD. OF SOLID SODDING

**NOTE:** QUANTITIES ARE ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.
### BASE AND SURFACING

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**AGGREGATE BASE COURSE (CLASS T)**

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**ADH Binder Course (**)**

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**ADH Surface Course (12")**

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### CONCRETE BASE

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**PORTLAND CEMENT CONCRETE BASE**

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### 4" PIPE UNDERDRAIN

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**UNDERDRAIN OUTLET**

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**ENGINEERED BY THE CONTRACTOR**

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### BENCH MARKS

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### QUANTITIES FOR FAP NO. STPU-9082(2)

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**QUANTITIES FOR**

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**NOTE:** SHOWN FOR INFORMATION ONLY. BENCH MARKS SHALL BE FURNISHED AND PLACED BY STATE FORCES.

**QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.**

### BASE AND SURFACING

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**AGGREGATE BASE COURSE (CLASS T)**

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### CONCRETE BASE

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**QUANTITY ESTIMATED. SEE SECTION 104.03 OF THE STANDARD SPECIFICATIONS.**
<table>
<thead>
<tr>
<th>ITEM</th>
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**SUMMARY OF QUANTITIES AND REVISIONS**

[Signature]
STA 16+72.02 CONSTRUCT
BEGIN SEBA ROAD CONSTRUCTION

STA 19+20 CONSTRUCT
D.L. INLET ON RT. H = 5'-2" WITH 4' EXTENSION
WITH 29" X 18" X 43' R.C. ARCH PIPE CULVERT OUTLET
CLASS IV TYPE 3 BEDDING AND F.E.S. RT.
TYPE D.0 DROP INLET = 4'DA
TYPE C DROP INLET = 4' X 4'

STA 18+29 IN PLACE
APPROACH LT. RETAIN

STA 17+81 IN PLACE
D.L. LT. WITH 29" X 18" X 139' ARCH PIPE
REMOVE 39' AND CONNECT TO D.L. LT.

REFER TO SURVEY CONTROL DETAIL SHEETS FOR HORIZONTAL AND VERTICAL CONTROL DATA.

E SEBA RD.
S 89'15" E

CONSTRUCTION LIMIT
5'-8" SIDEWALK

19+20 RT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

19+20 LT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

PL. OUT 498.61 (E)

E 19+20 RT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

E 19+20 LT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

E 18+00 RT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

E 18+00 LT.
TOP 475.79
PL 475.11
CL 475.11
EL 475.11

FL. OUT 498.61 (E)
TRAFFIC SIGNAL NOTES


2. EXTEND GREEN GROUNDING CONDUCTOR (E.G.C.I) FROM ROUND BAR AT MAIN BREAKER TO CONTROL PANEL, AND TO FIRST POLE. SOLIDLY BOND E.G.C.I TO GROUND LUG OF CONTROL CABLE AND TO POLE GROUND. ENSURE THAT ONLY ONE NEUTRAL-TO-GROUND BOND EXISTS IN THE SYSTEM. AND THAT IT IS AT THE MAIN BREAKER.

3. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/ COUNTY TO A SERVICE POLE WITH EXTERNAL WEIGHT-BREAKER MAIN BREAKER, GALVANIZED STEEL WITH TERMINAL STRIPS INSTALLED, MAINTENANCE AND WEATHERHEAD AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. IF THE SERVICE POINT IS OVER 10 FEET FROM THE CONTROL PANEL, CONTRACTOR SHALL PROVIDE AND INSTALL A SEPARATE TWO CIRCUIT EXTERNAL BREAKER (SECONDARY BREAKER) ON OR NEAR THE TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL CONDUIT, ELECTRICAL SERVICE WIRE (12/2-2), WITH GROUND TYPICAL. AND VARIOUS WEATHERPROOF DIONAGE, TO BE CONSIDERED SUBSIDIARY TO THE CONTROL EQUIPMENT, ARE NEEDED WHERE STREET LIGHTING IS INCLUDED. AS PART OF THE SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT 12/2 2 A.G.G. IF TYPICAL, SHALL BE KEPT FROM THE CIRCUIT SERVING THE TRAFFIC SIGNAL CONTROL EQUIPMENT FROM THE POINT OF TIE- IN AT THE SECONDARY BREAKER PROVIDED BY THE CONTRACTOR.

4. CONTRACTOR SHALL CONNECT A SEPARATE NEUTRAL FOR EACH LOAD SWITCH REPRESENTED ON EACH SIGNAL POLE.

5. TRAFFIC CONTROL CABINET AND LAYOUT SHALL BE SUCH THAT IT IS NOT NECESSARY TO SHUT DOWN POWER OR REMOVE LOAD SWITCHES IN ORDER TO EASILY TEST OR MODIFY DETECTOR INPUTS TO THE CONTROLLER.

6. CONTROLER CABINET SHALL BE WIRED SUCH THAT DURING FLASH OPERATIONS POWER TO THE LOAD SWITCHES CANNOT BE TAKEN WITH THE POWER BUSS.

7. ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE AHS6 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, STANDARDS AND WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.

8. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY PUSHING OR BORING METHODS. IF THE ENGINEER DETERMINES THIS IS NOT FEASIBLE, THEN A TRENCHING METHOD AS SHOWN IN THE STANDARD DRAWINGS MAY BE USED.

9. TRAFFIC SIGNAL POLES SHALL BE GALVANIZED. BACKPLATES SHALL BE SUPPLIED FOR ALL SIGNAL HEADS.

10. PAVEMENT MARKINGS SHOWN FOR REFERENCE ONLY. SEE PERMANENT PAVEMENT MARKING DETAILS.

11. FOUNDATION FOR ALL POLES SHALL BE EXTENDED IF NECESSARY TO ACCOMMODATE THE REQUIREMENTS FOR SIGNAL HEAD CLEARANCE ABOVE ROADWAY ON ELEVATIONS WHERE THE ELEVATION OF THE ROADWAY IS BELOW THE ELEVATION OF THE ROADWAY. SEE NOTES ON STANDARD DRAWINGS. PAYMENT WILL BE INCLUDED IN SECTION 718 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE AHS6 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

12. ALL CONCRETE FULL BOXES SHALL BE TYPE 2 HDI UNLESS OTHERWISE INDICATED. ALL CONDUIT SHALL BE THREE 1 3/4 INCH DIAMETER UNLESS SPECIFIED ON PLANS.

13. CONTRACTOR SHALL NOTIFY ALL EXISTING UTILITY OWNERS BEFORE BEGINNING WORK ON THIS PROJECT.

14. LUMINAIRES ASSEMBLIES SHALL BE OF THE FULL CUTOFF TYPE.

15. HARDWARE INPUTS MAY BE DETERMINED BY SUPPLIER. EACH DETECTOR OUTPUT SHALL INPUT THE CONTROLLER THROUGH A SEPARATE INPUT. UNLESS OTHERWISE NOTED AND BE PROGRAMMED TO ACTIVATE THE ASSOCIATED PHASE, COMBINATION I COMB. DETECTORS SHALL ALSO BE PROGRAMMED TO PROVIDE VEHICLE COUNT/OCCUPANCY DATA.

16. THE LOCAL RADIO WITH ANTENNA SHALL BE COMPATIBLE WITH THE EXISTING CLOSED LOOP COORDINATION SYSTEM IN THE CITY/COUNTY.

17. TO DETERMINE UTILITY CLEARANCES ABOVE THE TRAFFIC SIGNAL POLE, REFER TO THE POLE SCHEDULE FOR VERTICAL SHARP HEIGHT, WHERE THE POLE SCHEDULE INDICATES THAT A LUMINAIRE ARM WILL BE USED, THIRTY-EIGHT (38') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE LUMINAIRE ARM. WHERE THE POLE SCHEDULE INDICATES A TRAFFIC SIGNAL POLE WITHOUT A LUMINAIRE ARM, A HEIGHT OF TWENTY-ONE (21') FEET SHOULD BE USED TO DETERMINE UTILITY CLEARANCE ABOVE THE TRAFFIC SIGNAL MAST ARM. AN ADDITIONAL SIX (6') FEET SHOULD BE USED DIRECTLY ABOVE "VIDEO DETECTOR" AT LOCATION SHOWN ON THE SIGNAL PLANS.

18. THE DESIRABLE MINIMUM DISTANCE FROM THE FACE OF ROADSIDE CURB OR STRUCTURAL SUPPORTS OF NON-BREAKAWAY POLE OR OBSTRUCTION IS SIX (6') FEET. REFER TO TRAFFIC SIGNAL PLANS FOR SPECIFIC LOCATION OF POLES, CONTROLLER AND ANY OTHER NON-BREAKAWAY OBSTRUCTIONS. REFER TO "DESIGN PARAMETERS, MINIMUM CLEAR ZONE DISTANCE, FOR NON-BREAKAWAY POLE OR OBSTRUCTION, EDGE OF TRAVELED WAY TO THE END OF NON-BREAKAWAY POLE OR OBSTRUCTION" SHOWN INSTALLED WITHIN THE CLEAR ZONE.

19. AS DETERMINED BY THE ENGINEER, FOUNDATION EMBEJDING MAY BE DECREASED BY A MAXIMUM OF TWO FEET IF COMPETENT ROCK IS ENCOUNTERED PRIOR TO BEGINNING PLAN EMBEJDING. AT LEAST HALF OF THE REMAINING PLAN EMBEJDING LENGTH IS KEYYED INTO COMPETENT ROCK.

20. CONNECTION OF TRAFFIC SIGNAL DISPLAY TO FIELD WIRING SHALL UTILIZE AN APPROVED TERMINAL STRIP BEHIND HAND-HOLE COVER AT BASE OF POLE. TERMINAL STRIP SHALL PROVIDE PROTECTION TO PREVENT EXPOSURE TO THE PUBLIC IN THE EVENT THAT POLE COVER IS MISSING. PAYMENT FOR TERMINAL STRIPS SHALL BE INCLUDED IN ITEM 718 TRAFFIC SIGNAL MAST ARM AND POLE WITH FOUNDATION OF THE AHS6 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

21. CONTROLLER CABINET LAYOUT AND ORIENTATION SHALL CONFORM TO TMS STANDARDS.

22. ONE VIDEO MONITORING PROGRAMMABLE UNIT SHALL BE PROVIDED FOR THE DESIGNER AND SUPPLY DETECTORS. IF THE VIDEO SYSTEM CANNOT BE ADJUSTED THROUGH HARDWARE AND SOFTWARE PROVIDED BY ITEMS WITHIN THE JOB.

23. TRAFFIC SIGNAL CONTRACTOR MUST NOTIFY RESIDENT ENGINEER OR ASSIGNED DEPARTMENT PROJECT INSPECTOR EACH DAY PRIOR TO SIGNAL RELATED WORK. NO WORK ON TRAFFIC SIGNALS WILL BE ALLOWED ON APPROVED WITHOUT THIS PRIOR NOTIFICATION.


25. DOOR PANEL TEST PUSH BUTTONS SHALL ACTIVATE INDICATED PHASES. DETECTORS MOUNTED ON THE GROUND ELEVATION WHERE THE GROUND ELEVATION IS REQUIRED TO BE MODIFIED.

26. ALL SYSTEM DETECTOR RACKS AND ASSOCIATED EQUIPMENT SHALL BE PROTECTED BY THE MAIN CONTROLLER CABINET POWER SURGE PROTECTION.
### SUMMARY OF TRAFFIC SIGNAL QUANTITIES

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<td>SYSTEM LOCAL CONTROLLER TS 2–TYPE 2 (8 PHASES)</td>
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<tr>
<td>SP</td>
<td>LOCAL RADIO WITH ANTENNA</td>
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<td>SP</td>
<td>ANTENNA CABLE (TYPE 6)</td>
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<td>SP &amp; 707</td>
<td>COUNCITMENT PEDESTRIAN SIGNAL HEAD, LED</td>
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<td>TRAFFIC SIGNAL CABLE (20C/14 A.W.G.)</td>
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<td>ELECTRICAL CONDUCTORS–IN–CONDUIT (1C/8 A.W.G., E.G.C.)</td>
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<td>708</td>
<td>ELECTRICAL CONDUCTORS–IN–CONDUIT (1C/12 A.W.G., E.G.C.)</td>
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<td>GALVANIZED STEEL CONDUIT (1 1/2&quot;)</td>
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<td>CONCRETE PULL BOX (TYPE 2)</td>
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<tr>
<td>711</td>
<td>CONCRETE PULL BOX (TYPE 1 HO)</td>
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<td>CONCRETE PULL BOX (TYPE 2 HO)</td>
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<td>LED LUMINAIRE ASSEMBLY</td>
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<td>SERVICE POINT ASSEMBLY (2 CIRCUITS)</td>
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<tr>
<td>SP &amp; 733</td>
<td>18&quot; STREET NAME SIGN</td>
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<tr>
<td>SP &amp; 735</td>
<td>VIDEO DETECTOR (CLP)</td>
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<td>VEHICLE DETECTOR RACK (16 CHANNEL)</td>
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<td>735</td>
<td>VIDEO PROCESSOR, EDGE CARD (2 CAMERA)</td>
<td>5</td>
<td>EACH</td>
</tr>
</tbody>
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**NOTES:**

1. REFLECTIVE SHEETING SHALL COMPLY WITH ASTM 469 TYPE 3 OR 9 REFLECTIVE SHEETING. SHEETING AND LEGEND SHALL BE APPLIED IN SUCH A MANNER TO PROVIDE WRINKLE AND BUBBLE FREE SURFACES. APPLICATION OF SHEETING IS CAUSE FOR REJECTION OF MATERIALS DUE TO WORKMANSHIP.

2. ALUMINUM SIGN BLANK SHALL BE ALLOY 5052–H38; THE ALUMINUM SIGN BLANK SHALL ALSO BE ALUMINUM ALLOY 5052–H38. THE ALUMINUM SHEETING SHALL BE 0.100 INCH NOMINAL THICKNESS; AND OF THE SIZE SHOWN WITH 1/2" CORNER Radius PRIOR TO FABRICATION OF THE SIGNS, THE LAYOUT SHALL FIRST BE APPROVED BY AN AGENT OF THE CITY.

3. WHEN CROSSROAD HAS TWO NAMES, THE SIGN FOR THE CROSSROAD TO THE LEFT MAY BE INSTALLED ON THE BACKSIDE OF THE MAST ARM OF THE NEAREST LEFT POLE, SET 2" DRAWING SHEET FOR MORE INFORMATION FOR MOUNTING ON MAST ARM ASSEMBLY.

4. THE C 2000 STANDARD ALPHABET SHALL BE USED FOR ALL LETTERS.

**OVERHEAD STREET NAME MARKER**

**STANDARD MAST ARM MOUNTED**

**LOCATION:** HWY 1030/SEBA ROAD

**NOTE:** REGISTERED PROFESSIONAL ENGINEER

**SCALE:** 1/100 SCALE N/A DRAWN BY 7/17/17
NOTES TO CONTRACTOR:

1. ONE SEPARATE 1-5c IS RUN TO EACH POLE FOR THE PEDESTRIAN PUSH BUTTON.

2. ALL DETECTOR RACK CHANNELS, INCLUDING UNUSED, SHALL BE BROUGHT TO TERMINAL STRIP IN DETECTOR AREA OF CABINET.

3. THE LOCAL GOVERNMENT SHALL BE RESPONSIBLE FOR PROVIDING POWER TO THE SERVICE POINT.

GROUNDING ARRAY
SINGLE-PORT FUSION WELDS

LOCATION: HWY. 102B/SEBA ROAD
CITY: CENTERTON
COUNTY: BENTON

GROUND WIRE TO ANTENNA (STANDED)

SOLID E.G.C.

POLE GROUND CLAMP COMING ALL E.G.C.'S

CLAMP TO SOLID 8G E.G.C.

SOLID 8G E.G.C. PER STANDARD SPECIFICATIONS OF HIGHWAY CONSTRUCTION 2014 EDITION
ENERGY DISSIPATORS TO BE USED FOR THE ENTIRE LENGTH OF DITCH WHEN SLOPE OF DITCH PAVING EXCEEDS 1:2. THE DISSIPATORS WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.

NUMBER OF ELEMENTS PER ROW VARIAGES WIDTH OF PAVING SPECIFIED

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

TOE WALL DETAIL FOR CONCRETE DITCH PAVING

GENERAL NOTES:

THE FULL WIDTH OF EACH SECTION SHALL BE POURED MONOLITHICALLY.

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

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

1" WIDE TRANSVERSE EXPANSION JOINTS SHALL BE PLACED IN CONCRETE DITCH PAVING AT 40' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLIANT WITH ARKANSAS CODES.
I-29-07
REVISED
GUTTER SLOPE & MODIFIED CURB DETAILS

ADDED DETAILS OF TYPF IRS

DATE to-z-
REVISION
ARKANSAS STATE HIGHWAY COMMISSION
CURBING DETAILS

CONCRETE COMBINATION CURB AND GUTTER

DETAIL OF GUTTER SLOPE
GUTTER SHALL BE CONSTRUCTED ON 2% SLOPE AWAY FROM ROADWAY, REGARDLESS OF ROADWAY SLOPE.

LONGITUDINAL SECTION
ELEVATION

ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB

DETAILS OF MODIFIED CURB

NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR CURB AND GUTTER SPECIFIED.
CURBED ISLANDS FOR CHANNELIZATION

PLAN VIEW

ISOMETRIC VIEW

Refer to plans for type of curb face to be used. No direct payment will be made for the curb faces shown on the island details. Payment for the curb face will be included in the unit price bid for the item "Concrete Island".
### Table of Dimensions

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<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>S</th>
<th>H</th>
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<th>G/T</th>
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<td>-</td>
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<td>-</td>
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*The measured span and rise shall not vary more than ± 2 per cent from the values specified by AASHTO M 206.*

---

### Notes

1. Alternate connections to the pipe culverts, in accordance with manufacturer's standard practices, may be made subject to the approval of the engineer.
2. Pipe may be made of concrete or reinforced concrete.
3. Connectors shall be metal pipe catalogued with the Arkansas State Highway Commission.
OF PAY CURB LIMIT UPSTREAM & C FOR 7-TRANS. JOINTs.

NOTCH PAY LIMIT OF EXTENSION & (SEE GUTTER FOR NOTE (F CURB NO NOTCH FOR SIDEWALK, 

EXTENSION B.) SIDEWALK - ONE FIELD DEPRESSED GUTTER AT HEAVY CONS'T. CURB FOR Tz.

ELEVATION (EXTENSION B). OPENING LINE ON BOTH SIDES. CALLED FOR ON PLANS

APPROXIMATE TOTAL WEIGHT = 200 LBS.

CURB LIMIT OF EXTENSION & (SEE GUTTER FOR NOTE (F CURB NO NOTCH FOR SIDEWALK, 

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ELEVATION (EXTENSION B). OPENING LINE ON BOTH SIDES. CALLED FOR ON PLANS

APPROXIMATE TOTAL WEIGHT = 200 LBS.
GENERAL NOTES
1. MAILBOX POSTS MAY BE WOOD OR METAL. WOOD POSTS SHALL BE PRESSURE TREATED FOR GROUND CONTACT IN ACCORDANCE WITH SECTION 637.02 OF THE STANDARD SPECIFICATIONS.
2. MAILBOX SHELF, BRACKET & PLATFORM SHALL BE GALVANIZED OR PAINTED STEEL. HOWEVER, TREATED WOOD MAY BE USED WITH WOODEN POSTS. THE WOODEN SHELF, BRACKET & PLATFORM SHALL BE A MINIMUM OF 1/2" THICK. Wood screws used to attach the mailbox to the platform shall have a tolerance of +/- 1/8" according to AASHTO.
3. MAILBOX SUPPORT SYSTEM DIFFERING FROM THOSE SHOWN MAY BE USED PROVIDED THEY ARE ON THE AASHTO QUALIFIED PRODUCTS LIST FOR MAILBOX SUPPORTS.

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MAILBOX DETAILS
STANDARD DRAWING MB-1

ARKANSAS STATE HIGHWAY COMMISSION
INSTALLATION

TYPE 2 .SELECTED

STRUCTURAL BACKFILL, AND STRUCTURAL BEDDING MATERIALS SHALL HAVE A MAXIMUM PARTICLE SIZE OF 6" FOR CONSTRUCTION, STRUCTURAL BACKFILL MATERIALS SHALL BE PLACED IN \( \text{H} \) FROM THE PIPE. STRUCTURAL BEDDING MATERIALS SHALL BE COMPACTED TO THE \( \text{H} \) FROM THE PIPE BASE." AS PREFERRED FOR THE \( \text{H} \) FROM THE PIPE. STRUCTURAL BEDDING MATERIALS SHALL BE COMPACTED TO THE \( \text{H} \) FROM THE PIPE BASE." AS PREFERRED FOR THE \( \text{H} \) FROM THE PIPE BASE."

MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT \( \text{H} \)

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MINIMUM COVER FOR CONSTRUCTION LOADS

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<th>CLEAR DISTANCE BETWEEN PIPES</th>
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<td>3.0&quot;</td>
</tr>
<tr>
<td>36&quot;</td>
<td>3.5&quot;</td>
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GENERAL NOTES

1. PIPE SHALL CONFORM TO ASABE WORK TYPE INSTALLATION SHALL CONFORM TO ONE SPECIFICATION, PLASTIC PIPE AND SECTION SIZE OF THE STANDARD SPECIFICATIONS FOR PLASTIC PIPE, COMPACT PLASTIC PIPE, AND STEEL MATERIALS.

2. THE MAXIMUM ALLOWABLE TRENCH WIDTH SHALL BE THE MINIMUM WIDTH PLUS A SUFFICIENT WIDTH TO ENSURE WATER TO FLOW OR DRAIN AND TO ALLOW FOR WATER AND AIR TO FLOW OR DRAIN.

3. MATERIALS SHALL BE PLACED AS DIRECTED BY THE ENGINEER. AT THE ENDS OF THE TRENCH TO PREVENT LOSS OF STRUCTURAL BEDDING. WHEN MATERIALS ARE USED FOR STRUCTURAL BEDDING AND/OR BACKFILL, MATERIALS SHALL BE PLACED IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

4. WHEN DIRECTED BY THE ENGINEER. MATERIALS THAT ARE ENCOUNTERED AT THE ENDS OF THE TRENCH TO PREVENT LOSS OF STRUCTURAL BEDDING. WHEN MATERIALS ARE USED FOR STRUCTURAL BEDDING AND/OR BACKFILL, MATERIALS SHALL BE PLACED IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

5. WHEN DIRECTED IN THE ENGINEER'S INSTRUCTIONS, PLASTIC PIPE BEDDING MATERIAL SHALL BE COMPACTED TO THE MINIMUM ALLOWABLE TRENCH WIDTH BASED ON FILL HEIGHT \( \text{H} \) FROM THE PIPE BASE."

6. WHEN DIRECTED IN THE ENGINEER'S INSTRUCTIONS, PLASTIC PIPE BEDDING MATERIAL SHALL BE COMPACTED TO THE MINIMUM ALLOWABLE TRENCH WIDTH BASED ON FILL HEIGHT \( \text{H} \) FROM THE PIPE BASE."

7. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, INCLUDING ANCHORING APPARATUS AND RESTRAINTS TO HELP MAINTAIN GRADE AND ALIGNMENT IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

8. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, INCLUDING ANCHORING APPARATUS AND RESTRAINTS TO HELP MAINTAIN GRADE AND ALIGNMENT IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

9. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, INCLUDING ANCHORING APPARATUS AND RESTRAINTS TO HELP MAINTAIN GRADE AND ALIGNMENT IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

CONSTRUCTION SEQUENCE

1. PLACE STRUCTURAL BEDDING MATERIAL TO GRADE, DO NOT COMPACT.

2. INSTALL PIPE TO GRADE.

3. COMPACT STRUCTURAL BEDDING OUTSIDE THE MIDDLE THIRD OF THE TRENCH.

4. THE USE OF RESTRAINTS, INCLUDING ANCHORING APPARATUS AND RESTRAINTS TO HELP MAINTAIN GRADE AND ALIGNMENT IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.

5. PIPE INSTALLATION MAY REQUIRE THE USE OF RESTRAINTS, INCLUDING ANCHORING APPARATUS AND RESTRAINTS TO HELP MAINTAIN GRADE AND ALIGNMENT IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS.
INSTALLATION OF STRUCTURAL PIPE AND STRUCTURAL BEDDING

** MATERIAL REQUIREMENTS FOR STRUCTURAL PIPE AND STRUCTURAL BEDDING **

** SELECTED MATERIALS **

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<td>C</td>
</tr>
<tr>
<td>C1250</td>
<td>1300 psi</td>
<td>1250 psi</td>
<td>C</td>
</tr>
<tr>
<td>C1500</td>
<td>1500 psi</td>
<td>1500 psi</td>
<td>C</td>
</tr>
<tr>
<td>C1750</td>
<td>1700 psi</td>
<td>1700 psi</td>
<td>C</td>
</tr>
<tr>
<td>C2000</td>
<td>2000 psi</td>
<td>2000 psi</td>
<td>C</td>
</tr>
</tbody>
</table>

** AGGREGATE USED **

- Crushed stone
- Gravel
- Sand

** STRUCTURAL BEDDING MATERIAL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1 1/2" AND A MINIMUM DENSITY OF 95 PSI IN CONFORMITY WITH THE REQUIREMENTS OF APPORTION 14.

** STRUCTURAL BACKFILL AND STRUCTURAL BEDDING MATERIALS MAY NOT BE USED FOR Trench OR PIPE INSTALLATION **

** MINIMUM TRENCH WIDTH BASED ON FILL HEIGHT **

<table>
<thead>
<tr>
<th>FILL HEIGHT</th>
<th>TRENCH WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;H&quot; 0'-0&quot;</td>
<td>6'</td>
</tr>
<tr>
<td>&quot;H&quot; 1'-0&quot;</td>
<td>7'</td>
</tr>
<tr>
<td>&quot;H&quot; 2'-0&quot;</td>
<td>8'</td>
</tr>
<tr>
<td>&quot;H&quot; 3'-0&quot;</td>
<td>9'</td>
</tr>
</tbody>
</table>

** MULTIPLE INSTALLATION OF PVC PIPES **

<table>
<thead>
<tr>
<th>NUMBER OF LAYERS</th>
<th>CLEAR DISTANCE BETWEEN LAYERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>6&quot;</td>
</tr>
<tr>
<td>3</td>
<td>9&quot;</td>
</tr>
<tr>
<td>4</td>
<td>12&quot;</td>
</tr>
</tbody>
</table>

** MINIMUM COVER FOR CONSTRUCTION LOADS **

<table>
<thead>
<tr>
<th>PIPE DIAMETER</th>
<th>CLEARANCE REQUIREMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>12&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>16&quot;</td>
<td>30&quot;</td>
</tr>
</tbody>
</table>

MAXIMUM FILL HEIGHT BASED ON STRUCTURAL BACKFILL

<table>
<thead>
<tr>
<th>PIPE DIAMETER</th>
<th>MAXIMUM FILL HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>8&quot;</td>
<td>9'0&quot;</td>
</tr>
<tr>
<td>12&quot;</td>
<td>12'0&quot;</td>
</tr>
<tr>
<td>16&quot;</td>
<td>15'0&quot;</td>
</tr>
<tr>
<td>20&quot;</td>
<td>18'0&quot;</td>
</tr>
</tbody>
</table>

** DESIGNATED PIPE BEDDING **

- Structural Backfill
- Undisturbed Soil

** CONSTRUCTION SEQUENCE **

1. Place structural bedding material to grade, do not compact.
2. Install pipe to grade.
3. Compact structural bedding outside the middle third of the pipe.
4. The structural backfill shall be placed and compacted in layers not exceeding 8", the layers shall be brought up evenly and smoothly to the elevation of the minimum cover.
5. Pipe installation may require the use of restraints, bedding, or other approved methods in order to help maintain grade and alignment.

** GENERAL NOTES **

1. PVC pipe shall conform to ASTM F949, Class D.S.E. Installation shall conform to job specific design and specifications.
2. Plastic pipes shall meet all requirements of the AASHTO LRFD specifications.
3. The maximum allowable trench width shall be the minimum width plus a sufficient width to ensure working room to properly and safely place and compact backfill and other bedding materials.
4. Structural bedding material shall be placed as directed by the engineer at the ends of the culvert to prevent loss of structural bedding when bedding is used for structural bedding and/or backfill.
5. When directed by the engineer, unsuitable material that is encountered at the bottom of the excavated trench and/or area specified as "structural bedding" shall be compacted and replaced with structural bedding material that meets the requirements set forth in the "Selected Pipe Bedding" section.
6. When the existing material encountered for the pipe trench is determined to be unsuitable for backfill, the pipe shall be placed in an area specified by the engineer as "structural bedding." If the specified area for structural bedding is not available, the engineer may authorize the use of selected pipe bedding.
7. For pipe sizes that are not shown on the outside compaction of profile walls, backfill graduations shall be selected that will permit the filling of the cut-off profile or profile valley.
8. PVC pipes other than shown shall not be permitted.

** LEGEND **

- Structural Backfill
- Undisturbed Soil

** ARKANSAS STATE HIGHWAY COMMISSION **

** PLASTIC PIPE CULVERT (PVC F949) **

** STANDARD DRAWING PCP-2 **

** NEW GENERAL NOTES & MINIMUM COVER NOTES SELECTED PIPE MATERIAL **

** DATE **

** REVISION **

** DATE FILMED **
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 189 OF THE STANDARD SPECIFICATIONS.
3. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED EDITION 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.

2" FOR ASPHALT OR CONCRETE PAVEMENT
6" FOR BITUMINOUS SURFACE TREATMENT

NOTE:
THE RED LINE OF THE TYPE II RAISED SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

CROSSWALK AND STOPBAR DETAILS

Arkansas State Highway Commission

Pavement Marking Details

Revised detail of standard raised pavement markers

Arkansas General Notes & General Notes

Arkansas Crosswalk & Stopbar Rules of the Road

Arkansas truck route

3-30-80
7-30-80
11-30-80

Arkansas State Highway Commission

Standard Drawing PM-1
NOTES FOR PIPE UNDERDRAINS

1. Geotextile fabric shall meet the requirements of Section 625 for Type I. Payment for geotextile fabric and granular filter material shall be included in the price bid per lin. ft. for "4" pipe underdrains" in accordance with Section 625 of the standard specifications.

2. "4" non-perforated Schedule 40 PVC pipe laterals with outlet protectors shall be installed as shown herein. Laterals will be measured and paid for as "4" pipe underdrains." Underdrain outlet protectors will be measured and paid for by the unit in accordance with Section 625 of the standard specifications.

3. Existing "4" pipe underdrains may be connected to preformed drop inlets or extended where directed by the engineer. Payment for connecting to drop inlets shall be considered included in the price bid for "4" pipe underdrains."

4. The location of all laterals shall be marked with "4" x 12" permanent paint marks at the outside edge of the shoulder, placed transverse to traffic. Payment for this work shall be included in the price bid for the various contract items.

5. Payment for the rodent screen shall be included in the price bid per each for "underdrain outlet protectors."

6. Any existing underdrains that interfere with installation of the new underdrain system shall be removed and disposed of as directed by the engineer. Payment will be considered included in the price bid for the various contract items. Existing underdrain outlet protectors shall be removed under the item "removal and disposal of underdrain outlet protectors."

1. At locations where a single lateral is used, the contractor shall have the following options: 1. Install outlet protector as shown on standard drawing PU-1 and circuit the unused hole or 2. Install an outlet protector with a single hole.

UNDERDRAIN OUTLET PROTECTORS

LATERALS SHALL BE INSTALLED AT ALL SADs AND AT 20 FT INTERVALS ON GRADES. THE 20 FT DISTANCE MAY BE EXCEEDED ONLY WHERE NECESSARY FOR AN ACCEPTABLE OUTLET.

DETAILS OF PIPE UNDERDRAIN

PIPE UNDERDRAINS

NOTE: PVC pipe for laterals shall meet the requirements of ASTM D 3038 Latest Revision for Schedule 40 pipe.
**Loop Detector Installation and Testing**

**Notes:**
1. Loops with a perimeter greater than 40' shall have two turns. Loops with a perimeter less than or equal to 20' shall have three turns, unless otherwise noted on the plans. Quadruple loops shall be two turns.
2. Electrical auxiliary and feeder wire shall be continuous without splices except at the loop-feeder wire splice as shown. Splice shall be made soldered and waterproofed with accepted splice kit, drawn wire shall be ground to a ground rod at each loop and isolated at loop and feeder splice.
3. The loop to feeder splice, feeder jacket and jacket of loop wire in ducts shall be completely sealed and waterproofed.
4. Contractor may make connections to signal cable and loop to feeder connection at terminal straps mounted to pole inside hand cover as shown in detail. Terminals must be easily accessible, but protected against accidental contact. Connections of power carrying circuits must be separately from loop or loop circuits. All connections to terminal straps shall utilize space lug or as approved by the engineer.
5. If each loop shall have a separate feeder wire, unless otherwise noted, all feeder wires shall be labeled as to loop number as designated on the plans.
6. If loop wire entering pull box shall be enclosed in conduit, each loop wire shall enter full box or pole base through a separate piece of one inch ID conduit.
7. Loop wire from loop to conduit is not twisted. Loop wire in the conduit must be twisted two to five turns per foot.
8. Warranty period for loops shall not commence until tested by the contractor and accepted by the engineer, contractor shall perform test and provide a record to the engineer as listed in the detector loop testing procedure.
9. Unless otherwise approved by the engineer, backer box shall be installed in short sections spaced not more than 30' apart and welded into test to hold cable in place. Cable shall be totally encapsulated in sealers.
10. "Hot Port" sealers shall not be used with 50-Loop wiring in duct.
11. Where underground splices of signal cable are required, connections shall be soldered and completely waterproofed. A minimum of two inches past the signal cable jacket shall be completely covered with cable, all individual conductors of the signal cable, waterproofing does not apply to connections made in pole bases.
12. Contractor shall connect a separate neutral for each load switch represented on each signal pole. A neutral rated for telephone signal. A separate neutral is provided for pedestrian push buttons.
13. Traffic controller cabinets are layout shall be such that it is not necessary to shut down power or remove load detectors in order to test loop. If loads are not be removed from detectors it shall be wired such that power to load switches cannot backfeed to load switch power bus during flash operation.

**Typical Procedure for Detector Loop Testing:**

1. Disconnect and test continuity in 1/2" o.d. wire
2. If continuity is bad, go to test 3.
3. Test insulation @ 500 volt test @ 40 micro-ohm.
4. If tests 1 & 2 are good, further testing is necessary, recorded results consist of tests 1 & 2 from control cabinet with feeder wire connected to loop.
5. Open splice does not break connection repeat test 1 & 2.
6. Break splice, install jumper in cabinet, repeat tests 1 & 2 separately for feeder and for loop.
7. Failure typically result from broken wire in pavement, faulty insulation of loop or feeder wire, or poorly insulated splice connection.

**Trenching Detail**

- Concrete trench
- Concrete backfill
- Waterproofing
- Fill material
- Electrical conduit
- Watermain
- Gas main

**Typical Intersection**

- Loop detector wire
- Ground bus
- Earth
- Feeder wire
- Connector splice point
- Pull box
- Connection
- Temporary jumper for detector test
- Temporary jumper for feeder test
- Drawer or storage bin
- Transformer
- Controller cabinet
- Earth

**Typical Sections for Pulse and Presence Loop Detectors**

- Loop detector wire
- Sealed
- Looped wire
- 1/4" void
- Metal plate
- Labeled
- Concrete
- As required
- Ground bus
- Loop detector wire
- Control box
- As required
- Loop detector wire
- 1/4" void
- Metal plate
- Labeled
- Concrete

**Section 0-0**

- Loop detector wire
- 1/4" void
- Metal plate
- Labeled
- Concrete

**Traffic Signal Pre-emption Interface**

- Signal wiring diagram
- Pre-emption test switch
- 1/4" screw
- Labeled
- Metal plate
- Labeled
- Concrete

**Revision History**

- 1/0-13: Initial issue as standard drawing
- 1/0-13: Revised
- 1/0-13: Revised
- 2/0-13: Revised pre-emption test switch
- 6/0-13: Revised notes
- 6/0-13: Issued

**Arkansas State Highway Commission**

- Loop detector installation
- Standard Drawing SD-4
NOTES:
1. RIGHT HAND SLIDE, LEFT SLIDE OPPOSITE.
2. SLIDE ASSEMBLY CONSTRUCED AND INSTALLED ON DRAWER AND CONTAINS 111 RIGHT HAND SLIDE ASSEMBLY, 111 LEFT HAND SLIDE ASSEMBLY.
3. SLIDE ASSEMBLY NEEDED TO FASTEN SLIDE ASSEMBLY TO UNDER SIDE OF CONTROLLER SHELF SHOWN.

1.75"
14.00"
16.00"

FRONT VIEW

RIGHT SIDE ASSEMBLY
### ANCHOR BASE

- **Electrical Conduit**: EGC bonded to ground lug on pole and other EGC conductors.
- **Anchor Base**: Chip out, regROUT.
- **Leveling Nut**: Prescribed.
- **1" Chamfer**: Foundation.
- **5/8" Weep Hole**: Outgoing "YB to next pole/ground.
- **Ground Rod**: Prescribed.

### CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

- **Exist. Controller Cabinet**
- **Concrete Base**: NMC as shown on plans.
- **EXIST. CONTROLLER CABINET**: CONCRETE BASE
- **NOTE**: Entry to cabinet shall be through a cut in the base sufficient to provide adequate conduit radius for item.

### TYPE "HD" CONCRETE PULL BOX DETAIL

- **Top**: Pull box 12" x 12" x 3".
- **Elevation**: Pull box height 12" MIN.
- **Note**: All reinforcing bars to be grade 60.

### EXISTING POLE BASE

- **1/2" Galvanized Steel Conduit**: Chip out, regROUT.
- **Ground Rod**: Prescribed.

### Existing Conduit

- **3'-6" Reinforced Bars Each Side**: Note: All reinforcing bars to be grade 60.

### Pull Box

- **2" Clear from Top (leveled - 1")**

### Notes:

- All Type I and Type 2 HD Pull Boxes are installed with an apron of concrete at 12" MIN. MIN. and 6" to the base in depth. All apron shall be reinforced in accordance with the approved drawing. The required number and size of reinforcing bars in the apron on all sides of the pull box is required in concrete.

### Arkansa State Highway Commission

- **Standard Drawing SD-06**
- **Heavy Duty Pull Box**

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**Revision History**

- 1-20: Created standard drawings.
- 1-9-98: Revised standard drawings.
- 6-23-98: Revised & revised conduit entry.
- 6-1-99: Revised after consultant entry.
- 6-30-00: Revised.
- 7-2-00: Revised.
- 6-8-00: Final.

**Date** | **Revision** | **Date Final**
--- | --- | ---

VARIABLE 0-14

(A) 2' TYPICAL
CENTER ON LANE, BUT NOT
LESS THAN 8' SPACING

(B) 2' FROM LANE LINE
VARIABLE 0-14
2' FROM CURB LINE

(C) 2' TYPICAL
CENTER ON LANE, BUT NOT
LESS THAN 8' SPACING

(C1) CENTER ON LANE BUT
NOT LESS THAN 8' SPACING

(C2) HEAD 12 - 2' MN. TO
RIGHT OF LANE LINE

(C3) Offset 3'-6" TO 5'-0"
LEFT LANE CENTERLINE

(D1) CENTER ON LANE BUT
NOT LESS THAN 8' SPACING

(D2) 2'-4" LANE
EQUALLY SPACED
BUT NOT LESS THAN 8'

(D) 2'-4" LANE
EQUALLY SPACED
BUT NOT LESS THAN 8'

(E) CENTER OF LANE FROM APPROACH SIDE

GENERAL NOTES:

1. FOUR SECTION "PROTECTED/PERMISSIVE" LEFT TURN HEADS SHOULD BE PLACED A MINIMUM OF TWO (2') FEET TO THE RIGHT OF THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

2. THREE SECTION "PROTECTED" LEFT TURN HEADS SHOULD BE PLACED ON THE CENTERLINE OF THE APPROACHING LEFT TURN LANE.

3. WHEN IT IS NECESSARY TO PLACE POLES OTHER THAN AS SHOWN ON PLAN SHEETS Resulting in Poles Extending More Than Two Feet Past The Centerline Of The Approaching Left Turn Lane, Must Arm Shall Be Cut To Appropriate Length As Determined By The Arkansas State Highway Commission. When This Is Necessary, The Contractor Shall Be Responsible For Determining The Prior To Installing The Must Arm If Additional Compensation Is Required.

4. SIGNAL HEAD SPACING SHALL, IN NO CASE, BE LESS THAN EIGHT (8') FEET BETWEEN HEADS IN CENTER, MEASURED HORIZONTALLY PERPENDICULAR TO THE APPROACH.

5. ALL SIGNAL HEADS SHOWN ON THIS DETAIL SHEET SHALL BE LOCATED ACCORDING TO THE DIMENSIONS SHOWN IN RELATION TO THE APPROACH SIDE OF THE INTERSECTION.

6. MINE MOUNTING HEIGHT OF SIGNAL POSTS LOCATED BETWEEN 40 FEET AND 63 FEET FROM STOP BAR SHALL BE IN ACCORDANCE WITH FIGURE 40-5 OF 2009 MTOE.
Typical application - depths maintenance operations of short duration on a 2-lane divided roadway where half of the roadway is closed.

Typical application - 3-lane roadway where outer lane is closed.

GENERAL NOTES:
1. A speed limit reduction may be implemented ONLY when designated in the plan or when recommended by the Roadway Design Manager.
2. When the applying speed limit is being and the pans require a speed limit of more than the 2-lane divided roadway and the 2-lane divided road limit on the shoulder, the split column speed limit signs shall be installed on the outer lane of the roadway. At the end of the work area, the road shall be closed.
3. When the applying speed limit is being and the pans require a speed limit of more than the 2-lane divided roadway and the 2-lane divided road limit on the shoulder, the split column speed limit signs shall be installed on a straight section of road.
4. At the end of the work area, the road shall be closed.
5. Warning lights and/or the use of lights and/or stoplights may be required.
6. Pavement markings and/or signs shall be removed or obstructed as soon as practicable.
7. The split column speed limits shall be applied over two lanes. When the lane closure is not at the beginning of the project, the split column speed limit signs shall be installed on the shoulder of the roadway. When the lane closure is at the end of the project, the split column speed limit signs shall be installed on the shoulder of the roadway. When the lane closure is at the end of the project, the split column speed limit signs shall be installed on the shoulder of the roadway.
8. Flagger shall stay 200/200 outside for controlling traffic through work zones. Flags may be used only for emergency situations.
9. Pavement marking and/or signs shall remove the requirements of RAMP-150 or Method for Marking Safety Barriers (MMS).
10. Truck mounted devices such as drums and portable signs shall be placed at least 50 feet from the traffic zone. The device shall be placed on the road shoulder.
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 ONSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO Bottom OF DITCH.

WATTLE DITCH CHECK (E-1)

DROP INLET SILT FENCE (E-7)

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

GENERAL NOTES
1. SAND BAGS SHALL BE INSTALL3D SO THAT THE TOPS AND BOTTOMS OF THE BAGS ARE LEVEL WITH THE CLOTH OR COVER MATERIAL IF EMBLED 12" MIN. GEOXTEXILE FABRIC (TYPE 3) IN ACCORDANCE WITH SECTION 625

GENERAL NOTES
GEOTEXTILE FABRIC SHALL BE INSTALLED IN A MINIMUM AMOUNT OF ADDITIONAL MATERIAL FOR EXPLANATION.

GENERAL NOTES
1. BALE STRAW FILTER BARRIERS COMPARED AND ACCEPTED WILL BE MEASURED AT THE BAVL IN PLACE IT IS implicitly 30" IN LENGTH AND 1,000 FRAME PER BALES FOR BALE STRAW DITCH CHECKS.

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

GENERAL NOTES
BALLED STRAW FILTER BARRIERS EMPIRED AS APPROVED IS ACCEPTEO WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED.

GENERAL NOTES
BALED STRAW FILTER BARRIERS (E-2)

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

SLOPE TO BE 1:1 OR FLATTED

NOTE: SIZE OF BASIN TO BE DETERMINED BY VOLUME REQUIRED; HOWEVER, a MINIMUM LENGTH-TO-WIDTH RATIO OF 2:1 SHALL BE USED.

SECTION ON FLOW LINE

SEDIMENT BASIN WITH RIPRAP OUTLET (E-9)

TOP OF LEVEE

SLOPE TO BE 1:1 OR FLATTED

NOTE: SIZE OF BASIN TO BE DETERMINED BY VOLUME REQUIRED; HOWEVER, A MINIMUM LENGTH-TO-WIDTH RATIO OF 2:1 SHALL BE USED.

SECTION ON FLOW LINE

SEDIMENT BASIN WITH PIPE OUTLET (E-18)

DIVERSION DITCH (E-18)

NOTE: A SECTION SHALL BE USED AT THE INLET OR FLOW BLOCK, SHALL BE USED FOR ONE-DIRECTIONAL FLOW.

SEDIMENT BASIN WITH PIPE OUTLET (E-18)

ARMS STATE HIGHWAY COMMISSION
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-2
CLEARING AND GRUBBING

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

EXCAVATION

EXISTING GROUND

INTERCEPTOR OR DIVERSION DITCH

EXISTING GROUND

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

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

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

EMBANKMENT

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

CONSTRUCTION SEQUENCE
1. CONSTRUCT INTERCEPTOR DITCHES, DIVERSION DITCHES, SEDIMENT BASINS, SILT FENCES, OR OTHER EROSION CONTROL DEVICES AS SPECIFIED.
2. PLACE PHASE 1 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING.
3. PLACE PHASE 2 EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING.
4. PLACE FINAL PHASE OF EMBANKMENT WITH PERMANENT OR TEMPORARY SEEDING.
5. PLACE INTERCEPTOR DITCHES AND SLOPE DRAINS AND MAINTAIN UNTIL ENTIRE SLOPE IS STABILIZED.

ARLAKANS STATE HIGHWAY COMMISSION
TEMPORARY EROSION CONTROL DEVICES

STANDARD DRAWING TEC-3