INDEX OF SHEETS

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ROADWAY STANDARD DRAWINGS

DRWG.NO. | TITLE | DATE
---|---|---
CDP-1 | CONCRETE DITCH PAVING | 12-08-16
CG-1 | CURBING DETAILS | 11-29-07
DR-1 | DETAILS OF DRAWEWAYS & ISLANDS | 11-07-19
FEB-1 | FLARED END SECTION | 10-18-96
FES-2 | FLARED END SECTION | 10-18-96
FPC-05 | DETAILS OF DROP INLET & JUNCTION BOX (TYPE ST) | 07-26-12
PCC-1 | CONCRETE PIPE CULVERT FILL HEIGHTS & BEDDING | 02-27-14
PM-1 | PAVEMENT MARKING DETAILS | 02-27-20
SD-6 | HEAVY DUTY PULL BOX | 11-16-17
SD-9 | SERVICE POINT | 11-07-19
SD-11 | STEEL POLE WITH MAST ARM | 11-16-17
SHS-3 | DETAIL OF BREAKAWAY SIGN SUPPORTS FOR GUIDE SIGNS | 09-12-13
SHS-5 | DETAILS OF GUIDE SIGN PANELS | 09-12-13
SHS-6 | MOUNTING DETAILS FOR REMOVABLE LEGEND ON GUIDE SIGNS | 09-12-13
SHS-7 | DETAIL OF OMNI DIRECTIONAL BREAKAWAY SIGN SUPPORTS | 09-12-13
TC-1 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 11-07-19
TC-2 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 05-20-21
TC-3 | STANDARD TRAFFIC CONTROLS FOR HIGHWAY CONSTRUCTION | 08-12-21
TEC-1 | TEMPORARY EROSION CONTROL DEVICES | 11-16-17
TEC-2 | TEMPORARY EROSION CONTROL DEVICES | 06-02-94
TEC-3 | TEMPORARY EROSION CONTROL DEVICES | 11-03-94
WR-2 | WHEELCHAIR RAMPS ALTERATIONS ONLY | 10-09-03
GOVERNING SPECIFICATIONS
ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 2014, AND THE FOLLOWING SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS:

ERRATA FOR THE BOOK OF STANDARD SPECIFICATIONS
100-3 CONTRACTOR’S LICENSE
100-4 DEPARTMENT NAME CHANGE
102-2 ISSUANCE OF PROPOSALS
108-1 LIQUIDATED DAMAGES
108-2 WORK ALLOWED PRIOR TO ISSUANCE OF WORK ORDER
110-1 PROTECTION OF WATER QUALITY AND WETLANDS
210-1 UNCLASSIFIED EXCAVATION
306-1 QUALITY CONTROL AND ACCEPTANCE
505-1 PORTLAND CEMENT CONCRETE DRIVEWAY
600-2 INCIDENTAL CONSTRUCTION
603-1 LANE CLOSURE NOTIFICATION
604-1 RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES
604-3 TRAFFIC CONTROL DEVICES IN CONSTRUCTION ZONES (MASH)
605-1 CONCRETE DITCH PAVING
609-1 MULCH COVER
621-1 FILTER SOCKS
621-2 CONCRETE ISLAND
633-1 CONCRETE WALKS, CONCRETE STEPS, AND HAND RAILING
634-1 CURBING
700-2 TRAFFIC CONTROL FACILITIES
723-1 GENERAL REQUIREMENTS FOR SIGNS
730-1 BREAKAWAY SIGN SUPPORT
JOE 110600 BIDDING REQUIREMENTS AND CONDITIONS
JOE 110900 BROADBAND INTERNET SERVICE FOR FIELD OFFICE
JOE 110900 CONCRETE DITCH PAVING (TYPE FLUME)
JOE 110900 CONCRETE PULL BOX (TYPE 4 HD)
JOE 110900 ELECTRICAL CONDUCTORS FOR LUMINARIES
JOE 110900 ELECTRICAL CONDUCTORS-IN-CONDUIT
JOE 110900 ESTABLISHING CONTRACT TIME - WORKING DAY CONTRACT
JOE 110900 FIBER OPTIC FACILITIES
JOE 110900 HIGH MAST ILLUMINATION ASSEMBLY
JOE 110900 LED ROADWAY ILLUMINATION POLE
JOE 110900 MAINTENANCE OF TRAFFIC
JOE 110900 MANDATORY ELECTRONIC CONTRACT
JOE 110900 MANDATORY ELECTRONIC DOCUMENT SUBMITAL
JOE 110900 NATURAL GAS DISTRIBUTION
JOE 110900 PARTNERING REQUIREMENTS
JOE 110900 PEDESTAL TYPE SERVICE POINT ASSEMBLY
JOE 110900 REACTIVE AGGREGATE TESTING
JOE 110900 ROLLER COMPACTED CONCRETE PAVEMENT
JOE 110900 SANITARY SEWER FACILITIES
JOE 110900 SANITARY SEWER GRINDER
JOE 110900 SANITARY SEWER GRINDER PUMP STATION
JOE 110900 SHORING FOR CULVERTS
JOE 110900 SOIL STABILIZATION
JOE 110900 STEEL PIPE BOLLARDS
JOE 110900 STORM WATER POLLUTION PREVENTION PLAN
JOE 110900 THERMOPLASTIC PAVEMENT MARKING SYMBOL (WHEELCHAIR)
JOE 110900 TRASH RECEPTACLES
JOE 110900 UTILITY ADJUSTMENTS
JOE 110900 VALUE ENGINEERING
JOE 110900 WATER DISTRIBUTION FACILITIES

GENERAL NOTES

1. ALL PIPE LINES, POWER, TELEPHONE, AND TELEGRAPH LINES TO BE MOVED OR COVERED 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 TREES THAT DO NOT DIRECTLY INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE SPARED AS DIRECTED BY THE ENGINEER. CARE AND DISCRETION SHALL BE USED TO INSURE THAT ALL TREES NOT TO BE REMOVED SHALL BE HARMED AS LITTLE AS POSSIBLE DURING THE CONSTRUCTION OPERATIONS.
5. THE SEQUENCE AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS IS A GENERAL OUTLINE FOR THE CONSTRUCTION OF THIS PROJECT, AND IN NO WAY IS IT INTENDED TO COVER EVERY ITEM IN THE PROJECT. ITEMS NOT CRITICAL TO THE CONSTRUCTION SEQUENCE MAY BE CONSTRUCTED IN ANY STAGE AS APPROVED BY THE RESIDENT ENGINEER.
6. ALL FLEXIBLE BASE AND ASPHALTIC PAVEMENTS REMOVED SHALL BE PAID FOR UNDER THE ITEM 210 - UNCLASSIFIED EXCAVATION.
7. 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.
8. ASPHALT DEBRIS RESULTING FROM THE PREPARATORY WORK SHALL BE REMOVED FROM THE PROJECT. THIS MATERIAL SHALL NOT BE BURIED WITHIN THE RIGHT OF WAY.
CONCRETE CURB & GUTTER PER PLAN

6 YD DUMPSTER BY OTHERS

LENGTH PER PLAN

PIPE ROLLANT

6" ROLLER COMPACTED CONCRETE PAVEMENT

CONCRETE SLAB

TYPE "C" CURB FACE

6" ROLLER COMPACTED CONCRETE PAVEMENT

DUMPSTER PAD

"DO NOT ENTER" SIGN

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

<table>
<thead>
<tr>
<th>JOINT WIDTH</th>
<th>SEALANT THICKNESS</th>
<th>BACKER ROD DIAMETER</th>
<th>BACKER ROD PLACEMENT DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCHES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
<tr>
<td>1/8</td>
<td>1/16</td>
<td>1/16</td>
<td>1/16</td>
</tr>
<tr>
<td>1/16</td>
<td>1/32</td>
<td>1/32</td>
<td>1/32</td>
</tr>
</tbody>
</table>

JOINT CONFIGURATION FOR TYPE 3 OR 4 JOINT SEALANT

<table>
<thead>
<tr>
<th>JOINT WIDTH</th>
<th>SEALANT THICKNESS</th>
<th>BACKER ROD DIAMETER</th>
<th>BACKER ROD PLACEMENT DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCHES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2</td>
<td>1/4</td>
<td>1/4</td>
<td>1/4</td>
</tr>
</tbody>
</table>

GENERAL NOTES

1. THE EXPANSION JOINT SUPPORT MAY BE CONSTRUCTED WITH CLASS "A" CONCRETE. PAYMENT FOR THE JOINT SUPPORT SHALL BE FOR THE CONTRACT Unit PRICE. BE FOR THE EXPANSION JOINT SUPPORT, AND ALL OTHER WORK AND MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE JOINT SUPPORT SHALL BE INCLUDED IN THE PRICE RIG FOR THE ABOVE ITEMS.
2. CONTRACTORS JOINT SHOULD BE CONSTRUCTED ON UN COVERED.
3. TOOLS NOT REQUIRED FOR SELF-LEVELING SEALING.
DESCRIPTION OF WORK

STAGE I EROSION CONTROL SHALL INCLUDE PLACEMENT OF EROSION CONTROL DEVICES SHOWN, SITE DEMATERIALIZATION, TEMPORARY SLOPE STABILIZATION, TEMPORARY SODDING/SEEDING AND OTHER MEASURES AS DETERMINED BY ENGINEER OF RECORD.
DESCRIPTION OF WORK

STAGE 2 EROSION CONTROL SHALL INCLUDE PLACEMENT OF EROSION CONTROL DEVICES SHOWN SITE WATERING, PERMANENT SLOPE STABILIZATION, PERMANENT SEEDING/SEEDING, AND OTHER MEASURES AS DETERMINED BY ENGINEER OF RECORD.

SCALE IN FEET
200' 150' 0 100' 150'

LEGEND
SAND BAG DITCH CHECKS
ROCK DITCH CHECKS
COMPOST FILTER SOCK DRAIN INLET PROTECTION
SEDIMENT BASIN

REVISIONS

STAGE 2
TEMPORARY EROSION CONTROL DETAILS
CONSTRUCTION SEQUENCE
INSTALL BARRICADE AND CLOSURE SIGNS AS SHOWN ON MAINTENANCE OF TRAFFIC DETAILS.
INSTALL ADVANCE WARNING SIGNS AS SHOWN ON MAINTENANCE OF TRAFFIC DETAILS.

PHASE 1 AREA: REMOVE ALL ITEMS AS SHOWN ON DEMOLITION PLAN. CONSTRUCT UNDERGROUND UTILITIES, DRAINAGE STRUCTURES, BUILDINGS, AND NEW PAVEMENT AS SHOWN IN CONSTRUCTION PLANS.

PHASE 2 AREA: REMOVE ALL ITEMS AS SHOWN ON DEMOLITION PLAN. ADJUST EXISTING GROUND TO GRADES AS SHOWN ON PLAN SHEET. COMPACTION NOT REQUIRED IN FILL AREA.

REMOVE ADVANCE WARNING SIGNS.
REMOVE BARRICADES AND CLOSURE SIGNS.
### Advance Warning Signs and Devices

<table>
<thead>
<tr>
<th>SIGN NUMBER</th>
<th>DESCRIPTION</th>
<th>SIGN SIZE</th>
<th>RIGHT</th>
<th>LEFT</th>
<th>TOTAL SIGNS REQUIRED</th>
<th>BARRIERS (TYPE B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#3A</td>
<td>EXIT CLOSED</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>12</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>#1J</td>
<td>MILE STOP</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>#1P</td>
<td>1000 FEET</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>#2E</td>
<td>BARRIERS #5</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>#3E</td>
<td>BARRIERS #6</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>#4E</td>
<td>BARRIERS #7</td>
<td>48&quot;×8&quot;</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>TOTAL:</td>
<td></td>
<td></td>
<td>2</td>
<td>15</td>
<td>17</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: This is a high traffic volume road as defined in Section 231, Standard Specifications for Highway Construction.

### Removal and Disposal of Items

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CURB AND GUTTER</th>
<th>CONCRETE PAVEMENT</th>
<th>WALKS</th>
<th>POLE AND FOUNDATION</th>
<th>ELECTRICAL TRANSFORMERS</th>
<th>UNDERGROUND ELECTRICAL LINES</th>
<th>TOTAL SQ. FT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>1200</td>
<td>1200</td>
<td>546</td>
<td>5</td>
<td>1</td>
<td>505</td>
<td>1200</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>546</td>
<td>5</td>
<td>1</td>
<td></td>
<td>505</td>
<td>1200</td>
<td></td>
</tr>
</tbody>
</table>

### Clearing and Grubbing

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>CLEARING</th>
<th>GRUBBING</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>16</td>
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</table>

### Wheelchair Ramps

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>TYPE 6</th>
<th>TYPE 6</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

### CONCRETE Combination Curbs and Gutters

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CURB AND GUTTER</th>
<th>CONCRETE PAVEMENT</th>
<th>WALKS</th>
<th>POLE AND FOUNDATION</th>
<th>ELECTRICAL TRANSFORMERS</th>
<th>UNDERGROUND ELECTRICAL LINES</th>
<th>TOTAL SQ. FT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>5</td>
<td>5</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
<td>120</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>5</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### TRASH Receptacles

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>MODEL</th>
<th>EACH</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>11</td>
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<td></td>
</tr>
</tbody>
</table>

### CONCRETE Island

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>CURB PARK</th>
<th>GRADE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Construction Pavement Markings and Permanent Pavement Markings

#### Thermoplastic Pavement Marking

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>LOCATION</th>
<th>LENGTH</th>
<th>&quot;B&quot;</th>
<th>CONC. DITCH PAVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>THERMOPLASTIC PAVEMENT MARKING (WHITE 4&quot;)</td>
<td>7671</td>
<td>7671</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>THERMOPLASTIC PAVEMENT MARKING (WHITE 3&quot;)</td>
<td>1840</td>
<td>1840</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>THERMOPLASTIC PAVEMENT MARKING (YELLOW)</td>
<td>701</td>
<td>701</td>
<td>1363</td>
<td></td>
</tr>
<tr>
<td>THERMOPLASTIC PAVEMENT MARKING (YELLOW, REFLECTED)</td>
<td>701</td>
<td>701</td>
<td>1363</td>
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<td>TOTAL:</td>
<td>7671</td>
<td>7671</td>
<td>1363</td>
<td></td>
</tr>
</tbody>
</table>

Note: This is a high traffic volume road as defined in Section 231, Standard Specifications for Highway Construction.

### Concrete Ditch Paving

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>LENGTH</th>
<th>&quot;B&quot;</th>
<th>CONC. DITCH PAVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCRETE COMBINATION CURBS AND GUTTER</td>
<td>147.99</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>147.99</td>
<td>1.00</td>
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</tbody>
</table>

### Erosion Control

<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>SEEDING</th>
<th>LINE</th>
<th>WALCH COVER</th>
<th>WATER</th>
<th>SEEDING APPLICATION</th>
<th>SOLID SODDING</th>
<th>TEMPORARY SEEDING</th>
<th>WALCH COVER</th>
<th>WATER</th>
<th>SAND BASE DITCH CHECKS</th>
<th>ROCK DITCH CHECKS</th>
<th>FRACK DITCH CHECKS</th>
<th>SADDLE DITCH CHECKS</th>
<th>SOCK DITCH CHECKS</th>
<th>PILLAR SOCKET</th>
<th>PILLAR DETACH</th>
<th>PILLAR CHECK</th>
<th>PILLAR LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENTRY PROJECT</td>
<td>CLEARING AND GRUBBING</td>
<td>1.40</td>
<td>2.00</td>
<td>1.40</td>
<td>107.5</td>
<td>1.40</td>
<td>1175</td>
<td>1.40</td>
<td>1.40</td>
<td>26.8</td>
<td>350</td>
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<td>10</td>
<td>10</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>TOTAL:</td>
<td>4.83</td>
<td>4.14</td>
<td>224.5</td>
<td>238.9</td>
<td>2.04</td>
<td>1175</td>
<td>2.83</td>
<td>2.63</td>
<td>49.9</td>
<td>692</td>
<td>45</td>
<td>95</td>
<td>150</td>
<td>12</td>
<td>12</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The temporary erosion control, delineators shown above and on the plans shall be installed in such a sequence as to develop erosion and sedimentation in U.S. waters as explained by the national Pollutant Discharge Elimination System Permit.

*QUANTITIES ESTIMATED

See section 1640 of the STD. SPECS.
### Pipe Bollards

<table>
<thead>
<tr>
<th>Location</th>
<th>Pipe Bollard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>48</td>
</tr>
</tbody>
</table>

**Note:** Gas meter shall be included in the gas service quantity and placed at the discretion of the utility provider.

### Gas

<table>
<thead>
<tr>
<th>Gas Service</th>
<th>Gas Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each</td>
<td>L.N. Ft.</td>
</tr>
</tbody>
</table>

**Total:** 48

### Earthwork

<table>
<thead>
<tr>
<th>Location</th>
<th>Unclassified Excavation</th>
<th>Compacted Embankment</th>
<th>Soil Stabilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>2028</td>
<td>5172</td>
<td>100</td>
</tr>
<tr>
<td>Entire Project to be Used if Any When Directed by the Engineer</td>
<td>100</td>
<td>100</td>
<td>40</td>
</tr>
</tbody>
</table>

**Total:** 2128

**Note:** Quantities estimated.

### Standard Signs - Sheet Aluminum 0.100" Thickness (6 sq. ft. or less)

<table>
<thead>
<tr>
<th>Sign Number</th>
<th>Description</th>
<th>Sign Size</th>
<th>Total Signs Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN-6</td>
<td>Accessible Parking</td>
<td>24&quot; x 36&quot;</td>
<td>8</td>
</tr>
<tr>
<td>PO-1</td>
<td>Do Not Enter</td>
<td>24&quot; x 36&quot;</td>
<td>8</td>
</tr>
</tbody>
</table>

**Total:** 16

**Note:** This is a high traffic volume road as defined in Section 043201, Standard Specifications for Highway Construction.

### Driveways & Turnouts

<table>
<thead>
<tr>
<th>Location</th>
<th>Width</th>
<th>Portland Cement Concrete Driveway Feet</th>
<th>Sand, Yd.</th>
<th>Total</th>
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<tbody>
<tr>
<td>Building/Parking Area</td>
<td></td>
<td></td>
<td>200.48</td>
<td>283.48</td>
</tr>
</tbody>
</table>

### Selected Pipe Bedding

<table>
<thead>
<tr>
<th>Location</th>
<th>Selected Pipe Bedding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>28</td>
</tr>
</tbody>
</table>

**Note:** Quantity estimated. See Section 104.02 of the STD. SPECs.

### Structures

<table>
<thead>
<tr>
<th>Location</th>
<th>Reinforced Concrete Pole (4&quot;) Sections for R.C. Poles (Sec. 6.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>30</td>
</tr>
</tbody>
</table>

**Note:** For R.C. pipe culvert installations, use Type 3 bedding unless otherwise specified.

### PTZ Camera and Radar Detection System Conduct Installation

<table>
<thead>
<tr>
<th>Location</th>
<th>Non-Metallic Conduit (4&quot;)</th>
<th>Concrete Pull Box (Type IIIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

### Electrical

<table>
<thead>
<tr>
<th>Location</th>
<th>Non-Metallic Conduit (4&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformer Pad to Lighting Service Point</td>
<td>40</td>
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</tbody>
</table>

**Total:** 40

### Fiber Optic Conduct Installation

<table>
<thead>
<tr>
<th>Location</th>
<th>Concrete Pull Box (Type IIIH)</th>
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</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>28</td>
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</tbody>
</table>

**Total:** 28

### Sanitary Sewer

<table>
<thead>
<tr>
<th>Location</th>
<th>Sanitary Sewer Mainline 6&quot; or Less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Project</td>
<td>5</td>
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</table>

**Total:** 5

### Main Lanes Roadside Mounting Signed Quantities

<table>
<thead>
<tr>
<th>Sign No. / Location</th>
<th>Beam Structure Type</th>
<th>Guide Sign</th>
<th>Beam Sign Support</th>
<th>Steel Plate</th>
<th>Sign Plate</th>
<th>Sign Post</th>
<th>Footings</th>
<th>Sign Holder and Stud</th>
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<tbody>
<tr>
<td>M-13-TP19-300</td>
<td>1</td>
<td>15.00</td>
<td>7.00</td>
<td>106.00</td>
<td>10.00</td>
<td>100.00</td>
<td>1.00</td>
<td>3.90</td>
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<tr>
<td>M-13-TP19-400</td>
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<td>15.00</td>
<td>7.00</td>
<td>106.00</td>
<td>10.00</td>
<td>100.00</td>
<td>1.00</td>
<td>3.90</td>
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<tr>
<td>M-13-TP19-2000</td>
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<td>7.00</td>
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<td>100.00</td>
<td>1.00</td>
<td>3.90</td>
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**Total:** 3

**Note:** Basis of estimate is cement stabilized crushed stone base course + 4% aggregate 60% cement.

### Concrete Base

<table>
<thead>
<tr>
<th>Location</th>
<th>Length</th>
<th>Cement Stabilized Crushed Stone Base Type</th>
<th>Ricer Compacted Concrete Pavement</th>
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<tr>
<td>Entire Project</td>
<td>2000.00</td>
<td>472.86</td>
<td>5015.33</td>
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**Total:** 2066

### Water

<table>
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<tr>
<th>Location</th>
<th>PVC Arima C944 Class 188 (1&quot;)</th>
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<tbody>
<tr>
<td>Entire Project</td>
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**Total:** 100
SURVEY CONTROL COORDINATES

Project Name: 108000 I-40 TRUCK PARKING EXPANSION PROJECT (PH. I) (WEST MEMPHIS) (S)
Date: 3/16/2020
Coordinate System: ARKANSAS STATE PLANE - NORTH ZONE BASED ON GPS CONTROL, PROJECTED TO GROUND.
Units: U.S. SURVEY FOOT

<table>
<thead>
<tr>
<th>Point Name</th>
<th>Northing</th>
<th>Easting</th>
<th>Elev</th>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>1</td>
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<td>183760.8970</td>
<td>211796</td>
<td>CTL</td>
<td>ARODT STD MON STAMPED PN1 W.MEMPHIS</td>
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<td>2</td>
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<td>ARODT STD MON STAMPED PN3 W.MEMPHIS</td>
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<td>GPS</td>
<td>ARODT GPS MON 180014</td>
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<td>101</td>
<td>308075.7204</td>
<td>183384.9613</td>
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<td>GPS</td>
<td>ARODT GPS MON 180016</td>
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*Note - Rebar and Cap - Standard - 5/8" Rebar with 2" Aluminum Cap stamped
*Standard markings common to all caps, or as indicated
(Other markings indicated in the point description of the individual point).

USE CAF = 1.0 FOR STAKEOUT FOR THIS PROJECT.
PROJECT CAF OF .9999993522 HAS BEEN USED TO COMPUTE THE ABOVE GROUND COORDINATES.
THIS CAF IS INTENDED FOR USE WITHIN THE PROJECT LIMITS.
GRID DISTANCE = GROUND DISTANCE X CAF.
GRID COORDINATES ARE STORED UNDER FILE NAME, XXXCTL.
VERTICAL DATUM: NAVD 88 POSITIONAL ACCURACY THIRD ORDER, UNLESS SPECIFIED OTHERWISE.
AT A SPECIFIC POINT.

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

BASIS OF BEARING:
ARKANSAS STATE PLANE GRID BEARINGS - 0301-NORTH ZONE.
DETERMINED FROM GPS CONTROL POINTS: 180014 & 180016.
CONVERGENCE ANGLE: 01 23.6 RIGHT AT LAT N 35-09-22.277 LON W 90-14-29.6137
GRID AZIMUTH = ASTRONOMICAL AZIMUTH - CONVERGENCE ANGLE.

SURVEY CONTROL DETAILS
UTILITY NOTES

1. WATER SERVICE PLUG IS SEE SIZES THIS SHEET.
2. MA. GATE VALVE WITH ADJUSTABLE VALVE BOX IS SEE SIZES THIS SHEET.
3. MA. TEE WITH THRUST BLOCKING IS SEE SIZES THIS SHEET.
4. MA. REDUCER IS SEE SIZES THIS SHEET.
5. FIRE HYDRANT ASSEMBLY (PER LOCAL CODES).
6. WATER METER IS LOCATED AT COLLEGE BLVD. CONTRACTOR TO TEST IT OR INSTALL A NEW ONE (PER LOCAL CODES).
7. GRINDER PUMP STATION.
8. 4" INSIDE DIAMETER SANITARY SEWER MANHOLE W/ INLINE GRINDER
9. PROPOSED 4"X4" TRANSFORMER PAD
10. FUTURE POINT OF CONNECTION FOR ELECTRICAL SERVICE (PER ELECTRIC COMPANY REQUIREMENTS).
11. FUTURE GENERATOR AND PAD LOCATION.
12. GAS SERVICE PER LOCAL GAS COMPANY.
13. FUTURE GAS METER.

GENERAL NOTES

A. ALL FIBER OPTIC CABLE TO BE RUN IN SCHEDULE 40 PVC CONDUIT. SIZE SPECIFIED ON PLANS. 
B. ALL UNDERGROUND ELECTRIC CABLE TO BE RUN IN SCHEDULE 40 PVC CONDUIT. SIZE SPECIFIED ON PLANS. REFER TO LIGHTING PLANS.
C. ARROW TO PURCHASE, CONNECT AND INSTALL CAMERA AND RADAR EQUIPMENT.
D. CONTRACTOR TO PROVIDE TRACER WIRE ON FIBER CONDUIT.
E. ARROW TO PROVIDE AND PULL ALL FIBER OPTIC CABLE, PTZ CAMERA CABLE, AND RADAR DETECTION SYSTEM CABLE.
F. CONTRACTOR TO VERIFY EXISTING WATER SERVICE LINE E IN WORKING ORDERS AND WILL BE RESPONSIBLE FOR REPAIRS PRIOR TO CONNECTING ON TO IT.
G. ALL CONDUIT ENDS IN PULL BOXES AND ALL CONDUIT EXPOSED TO WEATHER FOR FUTURE PTZ CAMERA CABLE AND RADIATION DETECTION SYSTEM CABLE SHALL BE BE SEALED AND CAPPED FOR A FUTURE PHASE OF CONSTRUCTION.
H. ALL NON-METALLIC CONDUIT RUNS SHALL HAVE BELL RING FITTINGS INSTALLED ON THE TERMINATING ENDS OF THE CONDUIT. THIS INCLUDES PULL BOXES, POLE BASES, AND CABS.

SCALE IN FEET

1/16" = 1'-0"

BUILDING DETAIL
UTILITY PLAN

STATE OF ARKANSAS

NORTH ARKANSAS

FOC

UGE

FOC

UGE

FOC

UGE

FOC

UGE

FOC

UGE

FOC

UGE

0

20'

30'

40'

SCALE IN FEET

1/16" = 1'-0"
FIBER OPTIC CABLE
2" NMC FOR FUTURE
CONCRETE PULL BOX

CONCRETE PULL BOX
TYPE 4 HD
2" NMC FOR FUTURE
FIBER OPTIC CABLE

CONCRETE PULL BOX
TYPE 4 HD
1" NMC FOR FUTURE
PTZ Camera

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

1 - 2" NMC FOR FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC (REFER TO ILLUMINATION PLANS)

1 - 2" NMC FOR FUTURE PTZ CAMERAS
1 - 2" NMC (REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)

FIBER OPTIC CABLE
2" NMC FOR FUTURE
SPLICE POINT WITH
(TYPE 4 HD) AT FIBER
CONCRETE PULL BOX

CONCRETE PULL BOX
TYPE 4 HD
2" NMC FOR FUTURE
FIBER OPTIC CABLE

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
PTZ Camera

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

1 - 2" NMC FOR FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC (REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)

FIBER OPTIC CABLE
2" NMC FOR FUTURE
SPLICE POINT WITH
(TYPE 4 HD) AT FIBER
CONCRETE PULL BOX

CONCRETE PULL BOX
TYPE 4 HD
2" NMC FOR FUTURE
FIBER OPTIC CABLE

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
PTZ Camera

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

1 - 2" NMC FOR FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC (REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)

FIBER OPTIC CABLE
2" NMC FOR FUTURE
SPLICE POINT WITH
(TYPE 4 HD) AT FIBER
CONCRETE PULL BOX

CONCRETE PULL BOX
TYPE 4 HD
2" NMC FOR FUTURE
FIBER OPTIC CABLE

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
PTZ Camera

CONCRETE PULL BOX
TYPE 3 HD
1" NMC FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE
TRAFFIC SIGNAL MAST ARM AND
FUTURE RADAR DETECTION SYSTEM

1 - 2" NMC FOR FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC (REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)
CONCRETE PULL BOX (TYPE 3 HD) FOR FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC FOR FUTURE PTZ CAMERAS
1 - 2" NMC FOR HIGH MAST LIGHTING
1 - 2" NMC FOR ROADWAY LIGHTING
(REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 4 HD) WITH FUTURE RADAR DETECTION SYSTEM
1 - 2" NMC FOR FUTURE PTZ CAMERAS
1 - 2" NMC FOR HIGH MAST LIGHTING
1 - 2" NMC FOR ROADWAY LIGHTING
(REFER TO ILLUMINATION PLANS)

1 - 2" NMC FOR FUTURE PTZ CAMERA

1 - 2" NMC FOR FUTURE FIBER OPTIC CABLE

SERVICE PORT WITH CONCRETE PULL BOX TYPE 3 HD AND 1-2" NMC FOR FUTURE PTZ CAMERA AND RADAR DETECTION SYSTEM
1 - 2" NMC FOR FUTURE FIBER OPTIC CABLE
1 - 2" NMC FOR FUTURE PTZ CAMERA

CONCRETE PULL BOX (TYPE 2 HD) POLE FOUNDATION (0') FOR FUTURE TRAFFIC SIGNAL MAST ARM AND 1-2" NMC FOR FUTURE PTZ CAMERA
(REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)

1 - 2" NMC FOR FUTURE PTZ CAMERA

1 - 2" NMC FOR ROADWAY LIGHTING

1 - 2" NMC FOR HIGH MAST LIGHTING

FIBER OPTIC CABLE

2" NMC FOR FUTURE

CONCRETE PULL BOX

AND FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE

TRAFFIC SIGNAL MAST ARM AND

PTZ CAMERA.

POLE HEIGHT 50'.

1 - 2" NMC FOR FUTURE

PTZ CAMERA

1 - 2" NMC (REFER TO ILLUMINATION PLANS)

CONCRETE PULL BOX (TYPE 3 HD)

AND FUTURE RADAR DETECTION SYSTEM

1 - 2" NMC FOR ROADWAY LIGHTING

1 - 2" NMC FOR HIGH MAST LIGHTING

FIBER OPTIC CABLE

2" NMC FOR FUTURE

CONCRETE PULL BOX

AND FUTURE RADAR DETECTION SYSTEM

POLE FOUNDATION (0') FOR FUTURE

TRAFFIC SIGNAL MAST ARM AND

PTZ CAMERA.

POLE HEIGHT 30'.
GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NFPA 70, CURRENT EDITION), LIFE SAFETY CODE (NFPA 101, CURRENT EDITION), UGROUNDB ONE CALL CENTER IN ACCORDANCE WITH UNDERGROUND FACILITIES DAMAGE PREVENTION ACT (49 U.S.C. 70501 ET SEQ.) AND LOCAL ELECTRICAL CODE. IN ADDITION, ALL PARTS OF THIS INSTALLATION SHALL BE IN ACCORDANCE WITH THE ARKANSAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, CURRENT EDITION.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO PROJECT ENGINEER, TO ENSURE ARKANSAS STATE CODES (§17-36-101 ET SEQ. AND §23-31-101 ET SEQ.) ARE MET. THE DOCUMENTATION SHALL INCLUDE:
   (1) ELECTRICIANS' LICENSE INFORMATION AND EXPIRATION DATE.
   (2) THE RATIO OF LICENSED ELECTRICIANS TO APPRENTICE ELECTRICIANS.


4. ANY EQUIPMENT OR APPURTENANCE THAT INTERFERES WITH THE PROPOSED CONSTRUCTION AND WHICH MAY IMPAIR THE PROPERTY OF THE ELECTRICAL SERVICE ORGANIZATIONS SHALL BE MOVED BY THE OWNERS UNLESS OTHERWISE PROVIDED.

5. CONDUIT INSTALLED UNDER ROADWAY SURFACES SHALL BE INSTALLED BY A PULLING OR BORING METHOD OR AS DIRECTED BY ENGINEER. PVC OR HDPE CONDUIT SHALL BE USED. PVC CONDUIT SHALL BE MARKED "DIR. BORING" OR "DIRECTIONAL BORING" AS PER NEC.

6. NON-DESTRUCTIVE MEG TEST AND CURRENT LEAKAGE TEST SHALL BE PERFORMED ON NEW CONDUCTORS, IN THE PRESENCE OF FIELD INSPECTORS, AT A TEST VOLTAGE SHALL BE LIMITED TO 500 VOLTS. ANY CONDUCTOR NOT MEETING THE MINIMUM ACCEPTABLE VALUE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE USING NEW CONDUCTOR. THE RESULTS SHALL BE DOCUMENTED AND PROVIDED TO THE JOB ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED BY MEG TEST WHILE DEVICES OR ACCESSORIES ARE STILL CONNECTED AND SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. SEE SPECIAL PROVISION ELECTRICAL CONDUCTORS IN-CONDUIT.

7. PULL BOX LIDS SHALL CLOSE FLUSH WITHOUT PINCHING ANY CONDUCTORS. CONDUIT LENGTHS IN PULL BOXES SHALL BE SET ACCORDINGLY. ANY CONDUCTORS THAT HAVE BEEN DAMAGED BY PINCHING SHALL BE COMPLETELY REPLACED AT CONTRACTOR'S EXPENSE.

8. EACH ROADWAY ILLUMINATION POLE SHALL BE BONDED TO EQUIPMENT GROUNDING CONDUCTOR PER NEC. SEE ARTICLES 250 AND 410.

9. ALL ELECTRICAL COMPONENTS SHALL BE JL LISTED.

10. ALL LUMINAIRE ASSEMBLIES SHALL HAVE B2G RATING OF U0.

11. PULL CABLE SHALL BE MINIMUM 1/4" PULL NYLON OR POLYESTER ROPE, OR 1200 LB PULL TAPE W/ EN PULLING CONDUCTORS. STEEL CABLE OR FISH TAPS SHALL NOT BE USED. CONNECT PULLING DEVICES TO COPPER WIRE AND NOT TO JACKET. USE PULLING COMPOUND MANUFACTURER'S REQUIREMENTS. ALL BENDS SHALL NOT BE LESS THAN RECOMMENDED BY NEC FOR CONDUCTORS USED.

12. ALL CONCRETE PULL BOXES SHALL BE TYPE 2 HD UNLESS OTHERWISE INDICATED ON THE PLANS.

13. ALL CONDUIT SHALL BE "U" UNLESS OTHERWISE INDICATED ON THE PLANS.

14. SLACK CABLES IN PULL BOXES SHALL BE 3 FEET.
**LIGHTING NOTES:**

1. CONDUIT RUNS AND PULL BOXES NOT LABELED DEALS WITH OPTICAL FIBER AND FUTURE EQUIPMENT. REFER TO UTILITY PLANS.

2. FOI LUMINAIRES ORIENTATION AND X-Y COORDINATES OF POLES, SUB-LUMINAIRES SCHEDULED.

3. A FULL BOX SHALL BE INSTALLED WITHIN 5 INCHES OF DOE FOUNDATION.

4. CONDUIT BURIED UNDERGROUND SHALL HAVE MINIMUM 24 INCH DEPTH. CONDUIT INSTALLED USING DIRECTIONAL BENDING SHALL BE HOPE SCH 40, SCH 80, OR SCH 110.

5. INSTALL CONDUIT BEND FITTINGS ON NON-METALLIC CONDUIT ENDS. THE COST OF FITTINGS SHALL BE CONSIDERED SUBSIDIARY TO THE PAY ITEM "NON-METALLIC CONDUIT (2)."

6. THE DEGREE OF TILT LUMINAIRES SHALL BE ZERO.

7. ALL SPLICE SHELLS SHALL BE WATER-TIGHT AND UL-LISTED FOR CONTINUOUS USE IN SUSPENSIABLE INSTALLATIONS.

8. USE MINIMUM 1/4" PULL ROPE OR 1200 LBS. PULL TAPE WHEN PULLING CONDUCTORS.

9. E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.

10. CONDUCTA A MINIMUM 3-AH TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICABLE DAMAGED LUMINAIRES. MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED AND RE-TESTED THE SYSTEM, OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.

11. SEE STANDARD DRAWING 50-5 FOR PULL BOX CONSTRUCTION.


13. LOCATION OF SERVICE POINT MAY BE ADJUSTED WITH RESPECT TO FORCE MAIN.

14. POLES 01 THROUGH 05 UTILIZE TYPE III DISTRIBUTION. POLES 06 THROUGH 09 UTILIZE TYPE IV DISTRIBUTION.

15. ALL CONDUIT ENDS IN PULL BOXES AND ALL CONDUIT EXPOSED TO WEATHER SHALL BE SNIPE, AND CAPPED, FOR A FUTURE PHASE OF THE CONSTRUCTION.

16. ALL NON-METALLIC CONDUIT ENDS, OR TERMINATING ENDS, SHALL HAVE BELT END FITTING INSTALLER. THIS INCLUDES PULL BOXES, POLE BASES, CABINETS, AND INJECTION BOXES.
NOTES:
1. DISTANCE SHOWN IS MEASURED BETWEEN THE CENTER OF PULL BOXES.
2. 2C/6 A.W.G., E.G.C. INDICATES TWO #6 CONDUCTORS AND ONE #4 E.G.C.
3. 2C/2 A.W.G. INDICATES TWO #2 CONDUCTORS.
4. 1C/6 A.W.G. IS SERVED AS E.G.C.
5. OPTICAL FIBER CABLE AND PTZ CAMERA ARE CO-LOCATED AT POLES 08 AND 09.
6. ALL SPLICES SHALL BE WATERPROOF AND UL-LISTED FOR CONTINUOUS USE IN SUBMERSIBLE INSTALLATIONS.
7. USE MINIMUM 1/4" PULL ROPE OR 120 LB. PULL TAPE WHEN PULLING E.G.C. SHALL BE EXOTHERMICALLY BONDED TO GROUND ROD.
8. CONDUCT A MINIMUM 14-DAY BURN TEST FOR THE COMPLETE LIGHTING SYSTEM. REPLACE BURNED OUT AND NOTICEABLY DIM LUMINAIRES, MALFUNCTIONING EQUIPMENT SHALL BE CORRECTED, AND RETEST THE SYSTEM. OTHERWISE REMOVE AND REPLACE WITH NEW EQUIPMENT.
9. SEE STANDARD DRAWING SDS-4 FOR PULL BOX CONSTRUCTION.
10. SEE UTILITY PLANS FOR ADDITIONAL INFORMATION.
11. ALL CONDUIT ENDS IN PULL BOXES AND ALL CONDUIT EXPOSED TO WEATHER SHALL BE SEALED, AND CAPPED, FOR A FUTURE PHASE OF THE CONSTRUCTION.
12. ALL NON-METALLIC CONDUIT ENDS, OR TERMINATING ENDS, SHALL HAVE BELL END FITTING INSTALLED. THIS INCLUDES PULL BOXES, POLE BASES, CABINETS, AND JUNCTION BOXES.
NOTES:

1. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF WEST MEMPHIS, CRITTENDEN, AR, WITH A 1.3 GUST FACTOR ON THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 2001 EDITION WITH 2003 AND 2006 INTERMIS.

2. STEEL LUMINARIES SOLID CORE POLES SHALL BE A MINIMUM OF KGUAGE.

3. LUMINARIES SOLID CORE POLES SHALL BE HOT-DIPPED GALVANIZED.

4. OTHER DIMENSIONS PER MANUFACTURER'S RECOMMENDATION AS NECESSARY TO MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

5. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF 90 MPH WIND ZONE WITH A 1.3 GUST FACTOR ON THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 2001 EDITION WITH 2003 AND 2006 INTERMIS.

6. STEEL LUMINARIES SOLID CORE POLES SHALL BE HOT-DIPPED GALVANIZED.

7. OTHER DIMENSIONS PER MANUFACTURER'S RECOMMENDATION AS NECESSARY TO MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

8. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

9. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

10. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

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15. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

16. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

17. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

18. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

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31. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

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34. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

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36. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

37. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

38. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

39. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.

40. LUMINARIES SOLID CORE POLES SHALL MEET THE REQUIREMENTS OF THE SP - LED HIGHWAY ILLUMINATION POLE.
NOTES:

1. LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 50 MPH RIGID ZONE WITH A 50-125 GUST FACTOR ON THE ASABE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIDE LUMINAIRES AND TRAFFIC SIGNALS, ADHERE TO WITH 2003 AND 2006 INTERIM.

2. STEEL LUMINAIRE POLES SHALL BE A MINIMUM OF 1/4" THICK.

3.鋼 LUMINAIRE POLES SHALL BE HOT-DIPPED GALVANIZED.

4. OTHER DIMENSIONS PER MANUFACTURER'S RECOMMENDATIONS AS NECESSARY TO MEET THE REQUIREMENTS OF THE SF - LED ROADWAY ILLUMINATION POLE.

5. POLE CAP OR TENON CAP SHALL BE PROVIDED.

6. ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS.

7. THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

8. THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.

9. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH 4'-0" BEHIND GUARDRAIL.

10. THE TOP 8" OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232.

11. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25" X 30" FOR MOUNTING SPECIFICATIONS. THE TOP 8" OF ALL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

12. STEEL LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 50 MPH RIGID ZONE WITH A 50-125 GUST FACTOR ON THE ASABE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIDE LUMINAIRES AND TRAFFIC SIGNALS, ADHERE TO WITH 2003 AND 2006 INTERIM.

13. THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.

14. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH 4'-0" BEHIND GUARDRAIL.

15. THE TOP 8" OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232.

16. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25" X 30" FOR MOUNTING SPECIFICATIONS. THE TOP 8" OF ALL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

17. STEEL LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 50 MPH RIGID ZONE WITH A 50-125 GUST FACTOR ON THE ASABE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIDE LUMINAIRES AND TRAFFIC SIGNALS, ADHERE TO WITH 2003 AND 2006 INTERIM.

18. THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.

19. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH 4'-0" BEHIND GUARDRAIL.

20. THE TOP 8" OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232.

21. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25" X 30" FOR MOUNTING SPECIFICATIONS. THE TOP 8" OF ALL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.

22. STEEL LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 50 MPH RIGID ZONE WITH A 50-125 GUST FACTOR ON THE ASABE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIDE LUMINAIRES AND TRAFFIC SIGNALS, ADHERE TO WITH 2003 AND 2006 INTERIM.

23. THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE.

24. ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH 4'-0" BEHIND GUARDRAIL.

25. THE TOP 8" OF ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM M232.

26. ANCHOR BOLTS IN FOUNDATIONS SHALL BE 1.25" X 30" FOR MOUNTING SPECIFICATIONS. THE TOP 8" OF ALL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS. THE REQUIREMENTS OF THE SP - LED ROADWAY ILLUMINATION POLE.
NOTES:

1. LUMINAIRE POLES SHALL MEET THE REQUIREMENTS OF 90 MPH WIND ZONE WITH A 1.3 GUST FACTOR ON THE ASHTEC STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS, 2003 EDITION WITH 2005 AND 2006 INTERIM.

2. STEEL LUMINAIRE POLES SHALL BE A MINIMUM OF 1/2" THICKNESS.

3. POLE CAP OR TENON CAP SHALL BE PROVIDED.

4. ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 9.4 OF THE ASHTEC STANDARD SPECIFICATIONS. ALL ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A335. THE BOLT SHALL BE THREADED AND FURNISHED WITH HEX NUT AND TEMPLATE. THE LOWER END OF ANCHOR BOLTS SHALL HAVE TOP END THREADED NOT LESS THAN 5" AND FURNISHED WITH GALVANIZED HEX NUTS, LOCK WASHERS, AND TEMPLATE. THE LOWER END OF ALL ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF SECTION 714 OF THE STANDARD SPECIFICATIONS.

5. ALL METAL POLES SHALL BE BONDED TO E.G.C. PER NATIONAL ELECTRICAL CODE.
**SECTION A-A**

**METERED COMMERCIAL PEDESTAL**

100 AMP (N.T.S)

**NOTES:**
1. CONCRETE FOR CAST-IN-PLACE FOUNDATION SHALL BE CLASS 2, WITH A MINIMUM 28-DAY COMpressive STRENGTH, F.C. = 3500 PSI.
2. ALL REINFORCING STEEL SHALL BE GRADE 60, POLAR EDGE, ULTRA SAFETY-BAR OR EQUIVALENT.

**TYPICAL WIRING FOR LUMINAIRES**

THREE-WIRE, CIRCUIT-CENTER GROUNDED LUMINAIRES SERVED AT 240 VAC.

**LUMINAIRE WIRING SCHEMATICS**

- ULTIMATE ELECTRICAL CONNECTOR
- MULTI-PORT CONNECTOR
- THREE-WIRE CIRCUIT-CENTER GROUNDED TYPICAL WIRING FOR LUMINAIRES
- NEMA 3R CONTROL PANEL
- PHOTOCELL WINDOW
- LOCK WASHER
- LEVELING WASHERS
- 2" HEX NUT
- POLE CLAMP/REINFORCING STEEL
- FUSION WELD TO GROUND ROD
- #6 E.G.C. SOLID COPPER
- 15A/2P
- 30A/2P
- 40A
- 100A/2P
- 15A/2P
- SPD
- 40A
- 30A/2P
- N-G
- CONTACTOR
- 2. ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
3. ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.

**TYPICAL WIRING FOR LUMINAIRES**

THREE-WIRE, CIRCUIT-CENTER GROUNDED LUMINAIRES SERVED AT 240 VAC.

**LUMINAIRE WIRING SCHEMATICS**

- ULTIMATE ELECTRICAL CONNECTOR
- MULTI-PORT CONNECTOR
- THREE-WIRE CIRCUIT-CENTER GROUNDED TYPICAL WIRING FOR LUMINAIRES
- NEMA 3R CONTROL PANEL
- PHOTOCELL WINDOW
- LOCK WASHER
- LEVELING WASHERS
- 2" HEX NUT
- POLE CLAMP/REINFORCING STEEL
- FUSION WELD TO GROUND ROD
- #6 E.G.C. SOLID COPPER
- 15A/2P
- 30A/2P
- 40A
- 100A/2P
- 15A/2P
- SPD
- 40A
- 30A/2P
- N-G
- CONTACTOR
- 2. ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
3. ALL POLES. USE MANUFACTURER'S RECOMMENDED FUSE SIZE.
TYPICAL MAST ARM LAYOUT

SPRING LOADED, INTERCONNECTED CENTERING SYSTEM

LEVELING NUTS
ANCHOR BOLTS

BOLT COVER
BASE PLATE

RISER SUPPORT ASSEMBLY

LOCKNUT 304 STN. STEEL

HEAD FRAME ASSEMBLY

COVER - 3003 ALUM. ALZAK FINISH

MOUNTING BRACKET AND TERMINAL

LIGHTNING ROD

COVER - 3003 ALUM. ALZAK FINISH

SHEAVE & ROLLERS

POWER CABLE

INDICATOR FLAGS

WIRE RETAINER

BRACKET

TOP VIEW

OBSTRUCTION LIGHT

FAA APPROVED OBSTRUCTION LIGHT
ALL STRUCTURES EXCEEDING 200' ABOVE GROUND LEVEL OR AS DIRECTED

FAA APPROVED OBSTRUCTION LIGHT

90° 60° 45°

95" MAXIMUM

LEVELING NUTS
ANCHOR BOLTS

BOLT COVER
BASE PLATE

RISER SUPPORT ASSEMBLY

LOCKNUT 304 STN. STEEL

HEAD FRAME ASSEMBLY

COVER - 3003 ALUM. ALZAK FINISH

MOUNTING BRACKET AND TERMINAL

LIGHTNING ROD

COVER - 3003 ALUM. ALZAK FINISH

SHEAVE & ROLLERS

POWER CABLE

INDICATOR FLAGS

WIRE RETAINER

BRACKET

TOP VIEW

OBSTRUCTION LIGHT

FAA APPROVED OBSTRUCTION LIGHT

ALL STRUCTURES EXCEEDING 200' ABOVE GROUND LEVEL OR AS DIRECTED

TYPICAL MAST ARM LAYOUT

NOTE:
THESE DETAILS ARE NOT INTENDED TO LIMIT COMPETITION.
THE DETAILS AND SPECIAL PROVISIONS GOVERN THE MINIMUM QUALITY REQUIREMENTS CONCERNING MATERIALS AND OPERATION.
 NOTE: POWER INLET CABLE SHALL BE OF SUFFICIENT LENGTH TO ALLOW ENERGIZING LUMINAIRES WHEN LUMINAIRE RING IS IN THE LOWERED POSITION.

POWER INLET CABLE SHALL BE OF SUFFICIENT LENGTH TO ALLOW ENERGIZING LUMINAIRES WHEN LUMINAIRE RING IS IN THE LOWERED POSITION.

20'-0" IN LENGTH

REMOTE CONTROL WITH ELEC. CORD

SECONDARY SERVICE PEDESTAL DETAIL

INSTALL 3/8" X 3" COPPER CLAD GROUND ROD
**GENERAL NOTES:**

1. **TOE WALL DETAIL FOR CONCRETE DITCH PAVING**

2. **ARKANSAS STATE HIGHWAY COMMISSION**

3. **CONCRETE DITCH PAVING**

4. **STANDARD DRAWING CDP-1**

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**NUMBER OF ELEMENTS PER ROW VARIES WITH WIDTH OF PAVING SPECIFIED**

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

1. **TOE WALLS SHALL NOT BE PAID FOR THE STEEL AND ADDITIONAL CONCRETE FOR THE WALLS TO BE INCLUDED IN THE PRICE BID FOR CONCRETE DITCH PAVING.**

2. **ROCK EXCAVATION**

3. **WHEN DIRECTED BY THE ENGINEER TO BE ALTERED TO 1'-0" TOE WALL DEPTH MAY BE ALTERED TO 1'-0" TOE WALL DETAIL FOR CONCRETE DITCH PAVING. **

4. **FOR "W" DIMENSIONS REFER TO TABULATION OF QUANTITIES**

5. **FOR "W" & "B" DIMENSIONS REFER TO TABULATION OF QUANTITIES**

6. **TYPE A & B**

---

**ENERGY DISSIPATORS**

<table>
<thead>
<tr>
<th>Width (in)</th>
<th>Number of Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1'-0&quot;</td>
<td>3</td>
</tr>
<tr>
<td>2'-0&quot;</td>
<td>2</td>
</tr>
<tr>
<td>3'-0&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>

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**DATE**

- **11-17-10**
- **11-30-89**
- **7-15-88**
- **4-3-87**
- **1-9-87**
- **11-3-86**
- **11-1-84**
- **10-2-72**

**REVISION DATE FILMED**

- **6-2-94**
- **11-17-10**

**APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.**

**DITCH PAVING AT 45' INTERVALS. THE SPACE SHALL BE FILLED WITH 1" WIDE TRANSVERSE EXPANSION JOINTS.**

**SLABBING SOLID**

**2'-0" SOLID**

**SLABBING VARIABLES**

**SOLID SODDING.**

**DITCH PAVING AND LINES TO CONSTRUCT EXCAVATE TO NEAT**

**SLOPE: VARIABLE**

**4' ROUNDING AT 10'-0" CENTERS**

**3" DIA. WEEP HOLE AT 10'-0" CENTERS**

**SLOPE: VARIABLE**

**FOR "W" DIMENSIONS REFER TO TABULATION OF QUANTITIES**

**FOR "W" & "B" DIMENSIONS REFER TO TABULATION OF QUANTITIES**

**TYPE A & B**

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

**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 10' INTERVALS. THE SPACE SHALL BE FILLED WITH APPROVED JOINT FILLER COMPLYING WITH AASHTO M213.**
CONCRETE COMBINATION CURB AND GUTTER

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

ALTERNATE CONSTRUCTION METHOD FOR INTEGRAL CURB

NOTE: USE MODIFIED CURB AS SPECIFIED ON STD. DR-1. COMPENSATION FOR MODIFIED CURB WILL BE CONSIDERED INCLUDED IN THE PRICE BID FOR THE TYPE OF CURB OR CURB AND GUTTER SPECIFIED.
**Extension Details & Notes**

- **12'-0" MIN. - 40' MAX. DRIVEWAY WIDTH "W" BETWEEN ADJACENT DRAWYS.**
- **28'-0" MIN. ISLAND GRASS BERM 3'-0" NORM. WIDTH**
- **120 MAX. SLOPE**
- **AFT DEPTH **
- **8'-0" APRON DEPTH "D"**
- **SLOPE 2.0% MAX.**
- **ISLAND BEHIND BERM 2'-0" MIN. CONCRETE**
- **ADDED ISLAND DETAILS & NOTES**
- **8-22-02 11-10-05 11-29-07 8'-0"**
- **(8'-0" NORMAL)**
- **APRON DEPTH "D"**
- **SLOPE 2.0% MAX.***

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**Details of Driveways & Islands**

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD DRAWING DR-1

REDRAWN AND REISSUED

**Description**

11-18-98 11-19-98

REVISED NOTES

3-30-00

REV. MOD. CURB WIDTH & TRANS. NOTE

**Details**

- **JOINT EXPANSION SECTION A-A CURB MODIFIED EXTENSION DRIVEWAY**
- **SECTION B-B DRIVEWAY VERTICAL ALIGNMENT DETAILS**
- **JOINT EXPANSION**
- **EXTENSION TYPICAL SECTIONS**
  1. **CONCRETE - 6" P.C. CONCRETE DRIVEWAY**
  2. **ASPHALT - 2" ACHM SURFACE COURSE (1-1/2")**
     **4" ACHM BINDER COURSE (1")**
     **4" ACHM BASE COURSE (1-1/2")**
  3. **ASPHALT - 2" ACHM SURFACE COURSE (1-1/2")**
     **7" AGGREGATE BASE COURSE**
  4. **AGGREGATE - 6" AGGREGATE BASE COURSE**

**NOTE:** Driveways may not be sloped away from the roadway unless approved by the engineer.

**CURBED ISLANDS FOR CHANNELIZATION**

**VEHICLE PATH INSIDE EDGE OF CURB**

**COST TO THE DEPARTMENT. OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS.**

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**COST TO THE DEPARTMENT. OF THE TYPE SPECIFIED IN THE PLANS, BUT AT NO ADDITIONAL SUBSTITUTE A LOWER NUMBERED TYPE OF EXTENSION IN LIEU THE CONTRACTOR MAY, WITH THE APPROVAL OF THE ENGINEER, THE TYPE OF EXTENSION SHALL BE AS SHOWN IN THE PLANS.**

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**ARRIVAL OF CONCRETE INDUSTRY**

**USE TYPE "C" CURB FACE ON ALL SIDES OF CONC. ISLAND.**

**6" LONG CURB FACE ON ALL SIDES OF CONC. ISLAND.**

**6" LONG CURB FACE ON ALL SIDES OF CONC. ISLAND.**

**6" LONG CURB FACE ON ALL SIDES OF CONC. ISLAND.**

**6" LONG CURB FACE ON ALL SIDES OF CONC. ISLAND.**

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**Addendum Details & Notes**

- **11-19-07**
- **11-07-09**
- **11-07-09**
- **11-07-09**

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**Classified Details & Notes**

**CLASSIFIED DETAILS & NOTES**

**By the Enginee.**

**Details of Driveways & Islands**

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD DRAWING DR-1
1. The 'D' dimension shall match the final lift of ACHM surface course shown in the plans when asphalt paving surrounds the grate or ring cover, and shall be 0" at other installations.
2. The steps shall be omitted where 'H' is less than 4'-0".
3. The grate and frame shall be installed in the drop inlet so that the openings are perpendicular to the path of pedestrian travel.
4. The grate and frame shall be installed in the drop inlet in assembled position.
5. The approximate weight of the grate and frame shall be 211 lbs.
6. The minimum waterway opening shall be 122 SQ. IN.

General Notes (Ribbed Vane Grate & Frame):
- Castings may be made by referring to previously approved drawings.
- Similar castings with the approval of the engineer. Requesting approval for casting designs may be made by referring to previously approved drawings.
- Weight of the grate with cover in the absence of the two ribbed vane grates shall be used in lieu of the two ribbed vane grates.
- The steps shall be omitted where 'H' is less than 4'-0".
- All exterior corners are to have a 3" channel.
CONDUIT ENTRY TO EXISTING POLE BASE

ANCHOR BASE

ELECTRICAL CONDUIT
E.C.C. BONDED TO GROUND LUG ON POLE AND OTHER E.C.C. CONDUCTORS

HEX NUT
LOCK WASHER
FLAT WASHER
FLAT WASHER
LEVELING NUT
GRUVT
1" CHAMFER
FOOTING

3/8" DRILL HOLE

OUTGOING 3/8" TO NEXT POLE GROUND

1 1/8" COPPERWELD GROUND ROD
FLUXCORE WELD E.C.C.

GROUND ROD 10" MIN.

CONDUIT ENTRY TO EXISTING CONTROLLER CABINET

EXIST. CONTROLLER CABINET

NMC AS SHOWN ON PLANS

EXIST. CONTROLLER CABINET

CONCRETE BASE

NOTES:
ENTRY TO CABINET SHALL BE THROUGH A CUT IN THE BASE, SUFFICIENT TO PROVIDE ADEQUATE CONDUIT WULDS FOR THE FIT.

TYPE "HD" CONCRETE PULL BOX DETAIL

TOP

6 RENF, BARS

ELEVATION

NOTE:
ALL REINFORCING BARS TO BE GRADE 60

NOTES:
ALL TYPE 1 AND TYPE 2 HD CONCRETE PULL BOXES ARE INSTALLED WITH AN APRON OF CONCRETE 12" WIDE AND 7" IN DEPTH. ALL PAYMENT SHALL BE USED IN THE PRICE OF THE TYPE 4D CONCRETE PULL BOX. THE CONCRETE PULL BOX SHALL BE INSTALLED FLUSH TO SURROUNDING GRADE UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. THE CONCRETE SHALL BE CLASS "H" THREE 6 REINFORCING BARS IN THE APRON ON ALL SIDES OF THE CONCRETE PULL BOX IS REQUIRED IN CONCRETE.
DETAILS OF GUIDE SIGN PANELS

SUBSIDIARY TO THE ITEM "EXIT NUMBER PANEL".

SECONDARY SIGN INSTALLATION ON BACKSIDE OF GUIDE SIGN.

"X1" BAR POSITION AS REQ. BY SIGN ASSEM.

STANDARD SIGN

GUIDE SIGN

APPROX. THICKNESS OF REFLECTIVE SHEETING

OFFSET ACCEPTABLE

.375" MIN.

TYP. ONE PIECE EXTRUDED SIGN PANEL

ALUMINUM PANEL BOLT

AND HEX NUT (3/8"-16X3/4"

ALUMINUM POST CLIP

ALUMINIUM POST CLIP BOLT

AND (2) FLAT WASHERS

ALUMINUM STOP NUT

MOUNTING HARDWARE

POST CLIP BOLT


EXIT PANEL DETAILS

EXIT NUMBER PANELS SHALL HAVE WHITE LEGENDS AND LETTERING. THE BACK GROUND COLOR WILL BE AS USED SPECIFIED. SHEETING TYPE WILL BE THE SAME AS THE GUIDE SIGN WHICH THE EXIT PANEL IS ATTACHED TO AS SPECIFIED IN THE PLANS. PAINT FOR ALL POST CLIPS, BOLTS, AND ANGLES SHALL BE SUBMITTED TO THE STEEL EXIT NUMBER PANEL.

EXIT WITH 1 DIGIT 84"X30" = 17.50 SF

EXIT WITH 2 DIGITS 96"X30" = 20.0 SF

EXIT WITH 3 DIGITS 114"X30" = 23.57 SF

EXIT WITH 1 DIGIT PLUS "A" OR "B" 96"X30" = 20.0 SF

EXIT WITH 2 DIGITS PLUS "A" OR "B" 114"X30" = 23.57 SF

EXIT WITH 3 DIGITS PLUS "A" OR "B" 126"X30" = 26.25 SF

EXITS WITH 1 DIGIT PLUS "A" & "B" 132"X30" = 27.50 SF

EXITS WITH 2 DIGITS PLUS "A" & "B" 150"X30" = 31.25 SF

EXITS WITH 3 DIGITS PLUS "A" & "B" 168"X30" = 35.00 SF

1 DIGIT 24"X30" = 5.0 SF

2 DIGITS 42"X30" = 8.75 SF

3 DIGITS 60"X30" = 12.50 SF

1 DIGIT PLUS "A" OR "B" 42"X30" = 8.75 SF

2 DIGITS PLUS "A" OR "B" 60"X30" = 12.50 SF

3 DIGITS PLUS "A" OR "B" 78"X30" = 16.25 SF

ARKANSAS STATE HIGHWAY COMMISSION

STANDARD DRAWING SHS-5
THE CONTRACTOR SHALL DRILL AND POP-RIVET LEGEND, SHIELDS, ARROWS, OR OTHER COPY AS SHOWN.

THE BACKGROUND ON ALL GUIDE SIGNS AND STANDARD SIGNS SHALL BE CONSTRUCTED USING TYPE III SHEETING.

THE DEMOUNTABLE AND DIRECT APPLIED LEGENDS SHALL BE TYPE IX SHEETING.

NOTES:

LEGENDS ON GUIDE SIGNS ON THE MAIN LANES SHALL BE DEMOUNTABLE LEGEND.

LEGENDS ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED.

LEND ON GUIDE SIGNS ON THE MAIN LANES SHALL BE ORIENTED VERTICALLY AS PER MANUFACTURERS' DATUM MARKS.

LEGENDS ON GUIDE SIGNS ON CROSS ROADS AND RAMPS SHALL BE DIRECT APPLIED ORIENTATION MARKS.

NO OTHER METHOD OF APPLYING CHARACTERS IS ALLOWED.

ARKANSAS STATE HIGHWAY COMMISSION

MOUNTING DETAILS FOR DEMOUNTABLE LEGEND ON GUIDE SIGNS

STANDARD DRAWING SHS-6
MIN. 2' X 2' X 12GA.

TOP PLATE

GENERAL NOTES:

The top plate of triangular slip bases shall have the same exterior dimensions.

The inside diameter of the sign post shall be cut through the center of the top plate with the hole edge beveled as shown.

The bevel end shall be tangent to the bolt hole. Any misalignment shall be removed by grinding.

Face of bevel shall be finished to a minimum smoothness of $f=500$.

One sign or two signs

Mounting Hardware

Height as required for signs specified.

Placement

Height as required for signs specified.

Between signs

One sign or two signs

Shim Detail

Steel tubing sleeve 2" X 2' X 18"

Steel anchor 2" X 2" X 18"

Steel tubing @ 42" long

Steel angle 1" x 1" x 1/8" x 30"

The stub anchor shall be set in an SPF D-60, 42" deep concrete footing, refer to standard drawing SHS-3 for the footing details.

Arkansas State Highway Commission

Detail of Omni-Directional Breakaway Sign Supports

Standard Drawing SHS-7
GENERAL NOTES:

1. All traffic control devices used on road construction sites shall comply with the MUTCD and federal and state traffic control regulations. Traffic signs and temporary traffic control devices shall be maintained in proper working order. Maintenance shall be performed at least once per week. Worn, chipped, cracked, or damaged elements shall be replaced.

2. Temporary warning signs shall be set up at least 600 feet away from the construction zone. They shall be removed at the end of the work day. Signs must be kept in a secure location during non-working hours.

3. Traffic signs and temporary traffic control devices shall be mounted in a manner that ensures they are visible to drivers and pedestrians. They shall be mounted at a height where they are easily visible from a distance of 500 feet. They shall be placed so that they do not obstruct the view of the road or other traffic.

4. Traffic signs and temporary traffic control devices shall be placed on hard surfaces, such as pavement or gravel, to ensure stability and proper visibility. They shall be secured using appropriate fasteners or attachments to prevent movement or damage.

5. Temporary traffic control devices shall be placed in accordance with standard drawing TC-3. They shall be mounted on portable stands or other temporary support systems, with a minimum distance of 7 feet from the bottom of the sign to the roadway surface. They shall be removed when not in use.

6. Temporary traffic control devices shall be removed when not in use. They shall be stored in a secure location during non-working hours. They shall be replaced as needed to ensure proper visibility and functionality.

7. Traffic signs and temporary traffic control devices shall be replaced when they are damaged, defaced, or accumulate dirt. They shall remain in place only as long as needed for the duration of the job.

8. Temporary traffic control devices shall be removed at the end of the work day. They shall be stored in a secure location during non-working hours. They shall be replaced as needed to ensure proper visibility and functionality.

9. Temporary traffic control devices shall be removed when not in use. They shall be stored in a secure location during non-working hours. They shall be replaced as needed to ensure proper visibility and functionality.

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50. Temporary traffic control devices shall be removed when not in use. They shall be stored in a secure location during non-working hours. They shall be replaced as needed to ensure proper visibility and functionality.
Note:
Size of basin to be determined by volume required; however, a minimum length-to-width ratio of 2:1 shall be used.

Sediment Basin with Riprap Outlet (E-18)

Sediment Basin with Pipe Outlet (E-14)

Flow

Diversion Ditch (E-18)

Note:
A T-section shall be used at the inlet for two-directional flow. An elbow shall be used for one-directional flow.

Slope Drain (E-12)

Profile View

Sediment Basin (E-14)

Arkansas State Highway Commission
Temporary Erosion Control Devices
E-54

Plan View
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

NOTES: NUMBER OF PHASES WILL VARY, TIMED AS SHOWN FOR ILLUSTRATION

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

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

EMBANKMENT

EXISTING GROUND
SIDE DITCH TO BE STABILIZED AS REQUIRED

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

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

- The detectable warning device shall be located so that the nearest edge of the device is a minimum of 2.00 feet from the face of the curb.
- The length of the ramp shall be such that the slope does not exceed 12:1 to the nearest 0.01.
- The surface texture of the ramp shall conform to a Class 6 finish according to Section 802.19.
- The normal gutter grade shall be maintained through the area of the ramp selections.
- The full width of the curb ramp or flush surface shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices published by the Federal Highway Administration.
- The minimum width of the ramp walk and landing shall be 48 inches.
- All projects that require the purchase of additional right-of-way will usually be considered new construction.

### RAMP SELECTION CRITERIA

#### First Choice
- Type 1: Corners located within the walk adjacent to the curb with new construction.

#### Second Choice
- Type 2: Corners located with the walk offset from the curb a distance sufficient to allow the required ramp slope (both new construction and alterations).

#### Third Choice
- Type 3: Corners located within the walk offset from the curb a distance insufficient to allow the required ramp slope (both new construction and alterations).

#### Fourth Choice
- Type 4: Ramp locations with new construction and alterations.

#### Fifth Choice
- Type 5: Ramp locations with new construction and alterations.

**Notes:**
- In alterations, the selection of the type of wheelchair ramps to be constructed shall be based on the amount of right-of-way available and the presence of other site constraints such as utilities, buildings, etc.
- The three above lists the order in which the ramps are to be considered.
- An alteration is defined as a project that changes or affects the use of a pedestrian pathway and/or sidewalk. Construction projects, etc., that does not include the purchase of additional right-of-way will usually be considered new construction for the purposes of the chart above.

---

### Detectable Warning Device Details

**General Notes:**

- In alterations, wheelchair ramps are to be provided at curbed street intersections, pedestrian islands, and mid-block crosswalk locations.
- The length of the ramp shall be such that the slope does not exceed 12:1. The surface texture of the ramp shall conform to a Class 6 finish according to Section 802.19.
- The normal gutter grade shall be maintained through the area of the ramp selections.
- All projects that require the purchase of additional right-of-way will usually be considered new construction.

**Surface Texture:**

- The surface texture of the ramp shall conform to a Class 6 finish according to Section 802.19.

**Width:**

- The minimum width of the ramp walk and landing shall be 48 inches.

**Length:**

- The length of the ramp shall be such that the slope does not exceed 12:1 to the nearest 0.01.

**Slope:**

- The slope on the ramp walk and landing shall not exceed 8:1.

**Tactile Panels:**

- Tactile panels (ADA detectable warning) shall be located 24 inches in the direction of travel and extend forward of the curb for a maximum length of 5 feet or a maximum length of 2.4 feet.

**Domes:**

- Domes shall be aligned on a square grid in the pedestrian pathway to permit users to roll over domes.

**Backing:**

- The backing of the detectable warning device shall be the full width of the curb ramp or flush surface.

**INSTALLATION:**

- The detectable warning device shall be located on the road surface.

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**Table:**

<table>
<thead>
<tr>
<th>Type</th>
<th>Notes</th>
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</thead>
<tbody>
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**Appendix:**

- Appendix A: Additional Detectable Warning Devices
- Appendix B: General Notes for Detectable Warning Devices

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**Figure:**

- DETECTABLE WARNING DEVICE DETAIL

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**Diagram:**

- Type 5 Ramp
- Type 6 Ramp

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**Sign:**

- WARNING DEVICE
- DETECTABLE

---

**Text:**

- 50-65% of Base Dia.
- 0.2"
- 0.3-1.4"
- 2.4" Max.
- 1.6" Min.
- 2.4" Max.
- 1.6" Min.
- 5.65" Min.
- 2.4" Max.
- 50-65% of Base Dia.

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**Legend:**

- DETECTABLE WARNING DEVICE DETAIL
- WARNING DEVICE DETAIL
- REVISED DETECTABLE WARNING DEVICE DETAIL
- ADDED DETECTABLE WARNING DEVICE DETAIL
- REVISED GENERAL NOTES FOR DETECTABLE WARNING DEVICES
- DETECTABLE WARNING DEVICE DETAIL
- WARNING DEVICE DETAIL
- REVISED DETECTABLE WARNING DEVICE DETAIL
- ADDED NOTE.