DONAGHEY AVE & ROBINSON AVE

TRAFFIC SIGNAL

BID PACKAGE

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PROJECT LOCATION

CITY OF CONWAY
STREET & ENGINEERING DEPT
100 EAST ROBINS
CONWAY, AR 72032
501-450-6165

BID PACKAGE
## DONAGHEY AVE & ROBINSON AVE SIGNAL DESIGN

### QUANTITIES

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<th>Description</th>
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### NOTES AND QUANTITIES

- **NOTE:** ITEMS DESIGNATED BY "X" WILL BE PROVIDED BY THE CONTRACTOR.
Note: Where left turn head (head 1 on D1 and D2) is not called for by plans, the appropriate head shall still be aligned for through movement. Heads shall still be aligned with through lanes as shown on detail.

General Notes:

1. Four section "protected/permissive" left turn heads should be placed on the centerline of the approach left turn lane, but not less than 8 feet from the edge of the shoulder.

2. Three section "protected" left turn heads should be placed on the centerline of the approach, left turn lane but not less than 8 feet from the edge of the shoulder.

3. When it is necessary to place poles other than as shown on plans, the contractor is responsible for determining the appropriate length of the pole, resulting in the length of the mast arm extending more than two feet past the dimensions shown on the plan. The engineer shall be notified if the contractor intends to install the pole with an additional compensating pole.

4. Signal head spacing shall, in no case, be less than 8 feet on center, measured horizontally from the edge of the shoulder.

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. Maximum mounting height of signal faces located between 40 feet and 53 feet from stop bar shall be in accordance with Figure 4D-5 of 2009 MUTCD.

Arkansas State Highway Commission

Issued as Standard Drawing

Signal Head Placement

3-11-10 Revised Note 6

Date: 12-9-99

Signal Head Placement
7. NUT COVERS - EACH POLE SHALL INCLUDE A BOLT DOWN POSITIVE SLOPE WITH A LINE PERPENDICULAR TO THE POLE CENTERLINE.

16. REVIEW GROUNDING ADDED VIBRATORY MITIGATION DEVICE & NOTES

ISSUED AS STANDARD DRAWING

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**Typical Foundation Details**

- **Foundation Width**: 3'-0" 
- **Foundation Depth**: 6'-0" 
- **Foundation Length**: 24" MIN.

**Design Load**

- **Design Load for Arms 18' to 24'**: 56 LB.
- **Design Load for Arms 25' and Over**: 80 LB.

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**Typical Details**

- **Controller Cabinet Mounting Details**
- **Typical Foundation Width**: 3'-0" 
- **Typical Foundation Depth**: 6'-0" 
- **Typical Foundation Length**: 24" MIN.

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**Notes**

- **Notes**: REVISED NOTES & POLE MAST ARM SLOPE
- **Notes**: REVISED GROUNDING
- **Notes**: ADDED VIBRATORY MITIGATION DEVICE & NOTES

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**Diagram**

- **Diagram**: STEEL POLE WITH MAST ARM
- **Diagram**: FOUNDATION DETAILS
- **Diagram**: DETAIL SHEET

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**Specifications**

- **Specifications**: CONSTRUCTION SPECIFICATIONS, ATTACHED DEPARTMENT OF TRANSPORTATION DEPARTMENT STANDARD SPECIFICATIONS FOR TRANSPORTATION DEPARTMENT.
- **Specifications**: MINIMUM STRUCTURAL REQUIREMENTS:

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**Tables**

- **Table**: **Dimensions for Slenderness Factors**
- **Table**: **Concrete Mixtures**
- **Table**: **Steel Sizes and Weights**

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**Drawings**

- **Drawing**: PLOW FOUNDATION WITH CYCLICAL LUMINAIRE AND STEEL REINFORCING, SEE REINFORCING STEEL SHOWN TO WIRA
- **Drawing**: TYPICAL FOUNDATION DETAILS
- **Drawing**: CONTROLLED TYPICAL FOUNDATION DETAILS

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**Other Details**

- **Other Details**: ISSUED AS STANDARD DRAWING
- **Other Details**: REVISED GROUNDING
- **Other Details**: REVISED NOTES & POLE MAST ARM SLOPE
1. LOCATION OF SERVICE: TO MEET THE REQUIREMENTS FOR SAFETY AND MAXIMIZE LIGHTNING PROTECTION, THE SERVICE POINT MUST BE IN THE MIDDLE OF THE UTILITY PRIMARY SERVICE POINT MUST BE WITHIN SIX (6') FEET OF THE TRAFFIC SIGNAL CONTROL CABINET. ELECTRICAL SERVICE SHALL BE PROVIDED BY THE CITY/COUNTY TO A SERVICE POLE OR PEDESTAL WITH EXTERNAL MAIN BREAKER (MAIN BREAKER) AT A MUTUALLY ACCEPTABLE POINT WITHIN THE RIGHT-OF-WAY. SERVICE POINT INCLUDES GALVANIZED STEEL CONDUIT TO A POINT 18" BELOW GROUND LINE. TWO CIRCUIT MAIN BREAKER, POWER ISOLATION ASSEMBLY WHERE REQUIRED, METER LOOP IF REQUIRED BY LOCAL UTILITY, ELECTRICAL CONDUCTORS AND WEATHERHEAD. WHERE STREET LIGHTING IS INCLUDED AS PART OF SIGNAL INSTALLATION, STREET LIGHTING CIRCUIT (2C/12 AWG UF RATED, TYPICAL) SHALL BE KEPT SEPARATE FROM THE CIRCUIT SERVING TRAFFIC SIGNAL SERVICE WIRE AND WIRING FROM THE CONTROLLER TO MAIN BREAKER IS PROVIDED BY THE CONTRACTOR AS A PART OF THIS CONTRACT. WIRING AND WIRING FROM MAIN BREAKER AND CONNECTION TO THE UTILITY IS THE RESPONSIBILITY OF THE CITY/COUNTY.


3. SUPPLEMENTAL GROUND RODS: SUPPLEMENTAL GROUND RODS ARE FUSION WELDED TO 1 C/14 ROD, 4/0 COPPER GROUND WIRE. ATTACHMENT TO PRIMARY GROUND MAY BE AN APPROVED CLAMP. RODS ARE LOCATED IN A BOX APPROVED BY THE ENGINEER MEETING THE SAME LOADING REQUIREMENTS AS SECTION 711 CONCRETE PUL, BOX OF THE STANDARD SPECIFICATION, WITH THE EXCEPTION TO DIMENSIONS. BOX MAY BE EITHER ROUND OR SQUARE APPROXIMATELY SIX (6') INCHES MINIMUM INSIDE DIMENSIONS AND SIX (6') INCHES DEPTH, 1/STRONGWELL PC60B260 WITH PC60B260EIL OR EQUAL.