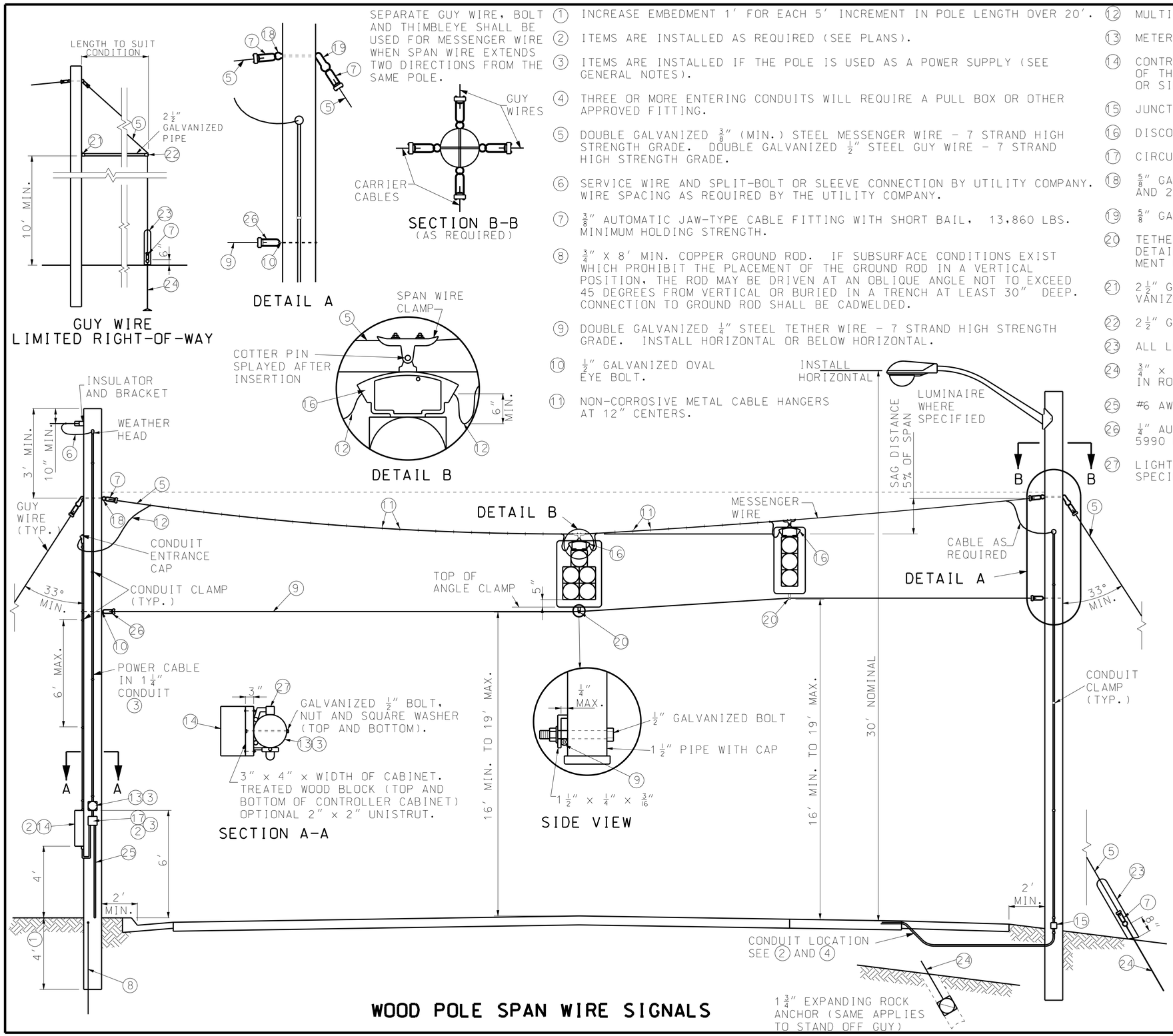

WOOD POLE SPAN WIRE SIGNALS

SEPARATE GUY WIRE, BOLT AND THIMBLEYE SHALL BE USED FOR MESSENGER WIRE WHEN SPAN WIRE EXTENDS TWO DIRECTIONS FROM THE SAME POLE.

1. INCREASE EMBEDMENT 1' FOR EACH 5' INCREMENT IN POLE LENGTH OVER 20'.
2. ITEMS ARE INSTALLED AS REQUIRED (SEE PLANS).
3. ITEMS ARE INSTALLED IF THE POLE IS USED AS A POWER SUPPLY (SEE GENERAL NOTES).
4. THREE OR MORE ENTERING CONDUITS WILL REQUIRE A PULL BOX OR OTHER APPROVED FITTING.
5. DOUBLE GALVANIZED 3/8" (MIN.) STEEL MESSENGER WIRE - 7 STRAND HIGH STRENGTH GRADE. DOUBLE GALVANIZED 1/2" STEEL GUY WIRE - 7 STRAND HIGH STRENGTH GRADE.
6. SERVICE WIRE AND SPLIT-BOLT OR SLEEVE CONNECTION BY UTILITY COMPANY. WIRE SPACING AS REQUIRED BY THE UTILITY COMPANY.
7. 3/8" AUTOMATIC JAW-TYPE CABLE FITTING WITH SHORT BAIL. 13,860 LBS. MINIMUM HOLDING STRENGTH.
8. 3/4" X 8' MIN. COPPER GROUND ROD. IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN A VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30" DEEP. CONNECTION TO GROUND ROD SHALL BE CADWELDED.
9. DOUBLE GALVANIZED 1/4" STEEL TETHER WIRE - 7 STRAND HIGH STRENGTH GRADE. INSTALL HORIZONTAL OR BELOW HORIZONTAL.
10. 1/2" GALVANIZED OVAL EYE BOLT.
11. NON-CORROSIVE METAL CABLE HANGERS AT 12" CENTERS.
12. MULTI-CONDUCTOR CABLE (SEE PLANS).
13. METER SOCKET AND CABINET.
14. CONTROLLER CABINET. ALL CONDUITS SHALL ENTER THE BOTTOM OF THE CABINET. NO HOLES SHALL BE MADE IN THE TOP, BACK OR SIDES OF THE CABINET.
15. JUNCTION BOX (NEMA 4).
16. DISCONNECT HANGER (NOT REQUIRED IF TEMPORARY)
17. CIRCUIT BREAKER. SEE STANDARD 902.15 FOR DETAILS.
18. 5/8" GALVANIZED STRAIGHT THIMBLEYE BOLT WITH GALVANIZED NUT AND 2 1/2" GALVANIZED CURVE WASHER.
19. 5/8" GALVANIZED ANGLE THIMBLEYE.
20. TETHER WIRE AND CLAMP WITH QUICK RELEASE PROVISIONS. SEE DETAIL FOR MOUNTING TO POLE AND SIGNAL. OPTIONAL ATTACHMENT PERMITTED WITH APPROVAL OF ENGINEER.
21. 2 1/2" GALVANIZED POST PLATE FASTENED TO POLE WITH ONE 5/8" GALVANIZED MACHINE BOLT & TWO 3/8" x 4" GALVANIZED LAG SCREWS.
22. 2 1/2" GALVANIZED CONNECTOR END FITTING.
23. ALL LOCATIONS REQUIRE GUY WIRE PROTECTOR. (7' MIN.)
24. 3/4" x 8' GALVANIZED THIMBLEYE ANCHOR ROD. (30" MIN. LENGTH IN ROCK).
25. #6 AWG BARE COPPER WIRE IN 1/2" CONDUIT.
26. 1/4" AUTOMATIC JAW TYPE CABLE FITTING WITH SHORT BAIL. 5990 LBS. MINIMUM HOLDING STRENGTH.
27. LIGHTING CIRCUIT BREAKER CABINET (IF LUMINARIES ARE SPECIFIED SEE STANDARD 902.15 FOR DETAILS.

GENERAL NOTES:

DESIGN OF STRUCTURAL SUPPORTS SHALL COMPLY WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS 2001 AND CURRENT INTERIMS.

MAXIMUM SPAN LENGTH:
100' FOR ONE OR TWO SPANS OFF POST, WITH ONE 5-SECTION HEAD SIGNAL, TWO 3-SECTION HEAD SIGNALS AND TWO SIGNS PER SPAN.

ALL APPURTENANCES TO BE MOUNTED ON POLE SHALL BE FASTENED TO POLE AS RECOMMENDED BY THE MANUFACTURER.

SCHEDULE 40 POLYETHYLENE OR POLYVINYL CHLORIDE CONDUIT AND WEATHER HEAD SHALL BE USED ON UTILITY COMPANY POLES IN LIEU OF RIGID STEEL CONDUIT.

NO DIRECT PAYMENT WILL BE MADE FOR GUYS, CONDUIT AND JUNCTION BOXES ON POLES, HARDWARE, LIGHTING BRACKET ARMS OR ANY OTHER ITEMS FOR WHICH SEPARATE PAYMENT IS NOT PROVIDED.

ALL GUY WIRES SHALL BE GROUNDED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
KATHRYN PHILLIPS HARVEY
NUMBER PE-23751
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

TRAFFIC SIGNALS

RIGID SPAN WIRE DETAILS

DATE EFFECTIVE:	02/01/2008	902.70P	SHEET NO. 1 OF 2
DATE PREPARED:	8/26/2009		

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.