24. All electrical connections to the signals shall be grounded in accordance with applicable electrical codes.

25. Traffic signal structures have been designed in accordance with the AASHTO standard specifications for structural supports for highway signals, laminates, and traffic signals, Fourth Edition, 2001.

26. Design data for the traffic signals have been submitted to the state-based engineering firm, City of Denver, for review and approval. All unit loads shall be calculated in accordance with Section 509.18 of the standard specifications.

27. Certified mill test reports, including Charpy V-notch test results, weld inspection reports, and enhanced magnetic particle test results shall be submitted to the state-based engineering firm, City of Denver, for review and approval. All materials shall have a minimum value of 15 FT-Lbs at 40°F as per the Freq. test requirements in Section 509.18 of the AASHTO standard specifications.

28. Shop drawings shall be submitted to the engineer for review in accordance with Subsection 10.02 of the standard specifications.

29. Definitions: U.O.N. = Unless otherwise noted

W.P. = Work Point P = 10 LB.

30. Traffic signals mounted on mast arms shall be furnished with ASTO type mounting brackets.

31. The minimum diameter of the secondary mast arm shall be increased 0.5 of the readings and weld profiles to provide the minimum required arm slip splice lengths and pole member overlaps.

32. Use 35’ of #°20 high strength chain (safe working load of 5,000 LB.) and two “S” shaped hooks properly forged and approved by the Colorado office of transportation.

33. Secure arm flange plate, pole base plate, and connection faceplate during welding to prevent distortion.

34. One drilled hole with a maximum diameter of 1”.4 shall be located in the area shown below:


36. Use 3° of 65’ high strength chain (safe working load of 5,000 LB.) and two “S” shaped hooks properly forged and approved by the Colorado office of transportation.

37. Traffic signals will not be installed within the roadway earthwork prism.

38. When the upper and lower nuts are in firm contact with the base plate, with mast arms free to rotate, and lower nuts shall be tightened with a slugging hydraulic or air impact wrench.

39. The design length “L” for each series is shown in parentheses.

40. For the traffic signals, the primary arm shall be located in the center of the work area, and the secondary arm shall be located in the same lane as the primary arm.

41. All electrical connections to the traffic signals shall be grounded in accordance with applicable electrical codes.