RELEASED FOR CONSTRUCTION 11/04/09

TUBULAR EXTENSION SPECIFICATIONS

GENERAL:

1. EXTENSIONS SHALL BE FURNISHED WITH A 4"X 6-1/2" REINFORCED HAND-HOLE COMPLETE WITH COVER ATTACHING BY MEANS OF STAINLESS STEEL HARDWARE OPPOSITE THE 2" CONDUIT ENTRANCE.
2. PROVISIONS FOR WIRE ACCESS AS WELL AS FOR GROUNDING MUST BE PROVIDED.
3. EXTENSIONS SHALL BE FURNISHED WITH A 1/2"-13NC GROUND NUT WELDED TO THE OUTSIDE EDGE OF THE BASE.

DESIGN:

1. TUBULAR EXTENSIONS SHALL MEET OR EXCEED THE DESIGN CRITERIA FOR POLES SPECIFIED WITHIN THIS CONTRACT.
2. THE DESIGN SHALL MEET OR EXCEED THE REQUIREMENTS OF THE ELECTRONIC INDUSTRIES ASSOCIATION RS-222-C, CLASS "C".
3. ALL EXTENSIONS SHALL BE DESIGNED FOR SUPPORT OF MICROWAVE EQUIPMENT AND CAMERAS NOT WEIGHING MORE THAN 25 POUNDS EACH.

MATERIALS:

1. ALL ROUND TAPERED TUBES SHALL CONFORM TO REQUIREMENTS OF ASTM-595 GRADE A.
2. STEEL BASE PLATES SHALL BE MANUFACTURED FROM STEEL CONFORMING TO ASTM-A36.
3. ANCHOR BOLT MATERIAL SHALL CONFORM TO REQUIREMENTS OF ASTM-A675 GRADE 90. THE ANCHOR BOLTS SHALL BE GALVANIZED ON THE THREADED END (GALVANIZING IS IN ACCORDANCE WITH ASTM-A153). BOLTS SHALL BE FURNISHED WITH TWO GALVANIZED HEX NUTS AND A TAPPED PLATE OR AN L BEND.

FINISH:

TUBULAR EXTENSIONS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM-A123.

NOTE: ALL DESIGNS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE STATE OFFICE OF BRIDGE DESIGN FOR APPROVAL PRIOR TO INSTALLATION.

NOTE: TUBULAR EXTENSIONS ARE PAID FOR AS PART OF CAMERA ASSEMBLY.

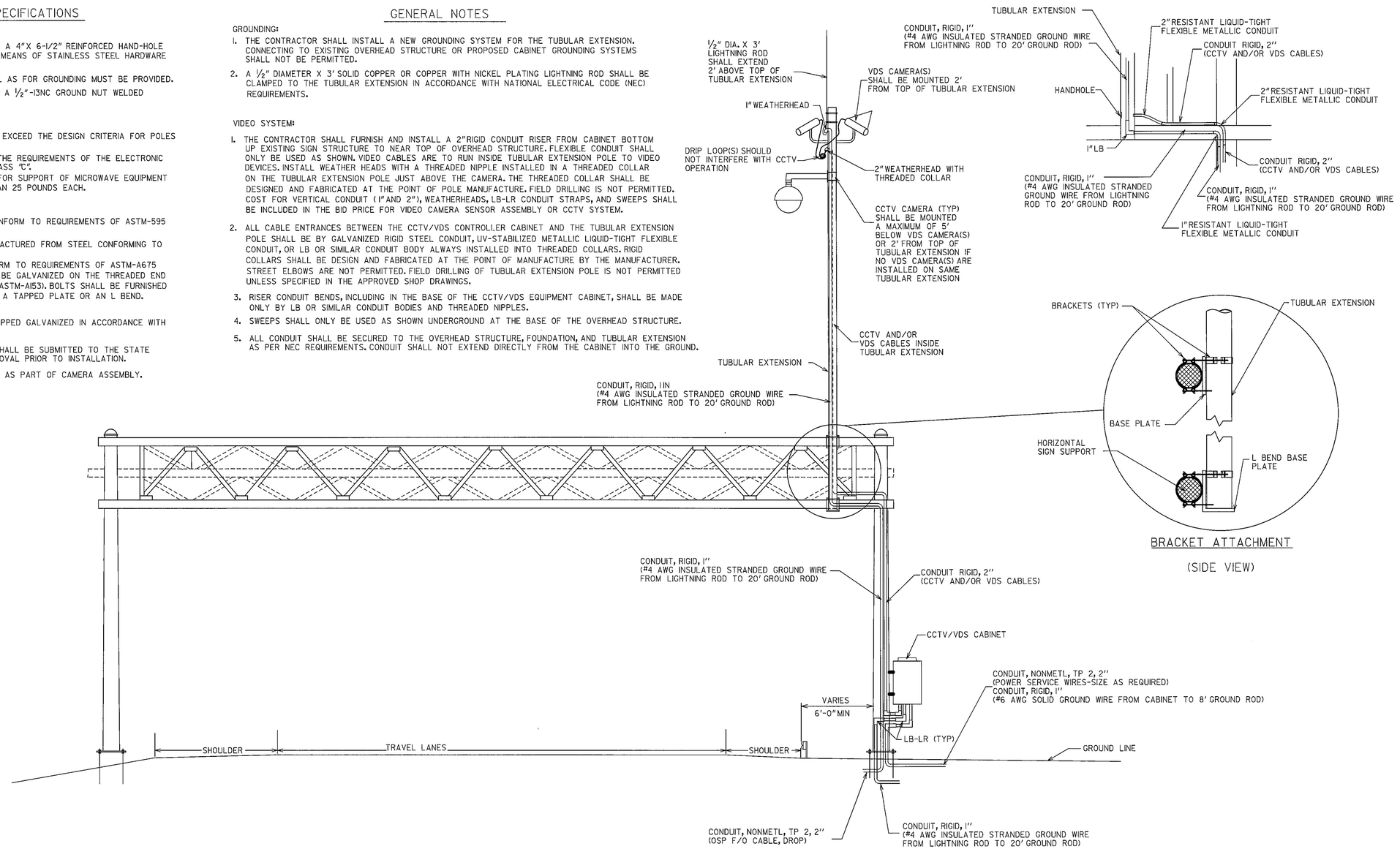
GENERAL NOTES

GROUNDING:

1. THE CONTRACTOR SHALL INSTALL A NEW GROUNDING SYSTEM FOR THE TUBULAR EXTENSION. CONNECTING TO EXISTING OVERHEAD STRUCTURE OR PROPOSED CABINET GROUNDING SYSTEMS SHALL NOT BE PERMITTED.
2. A 1/2" DIAMETER X 3' SOLID COPPER OR COPPER WITH NICKEL PLATING LIGHTNING ROD SHALL BE CLAMPED TO THE TUBULAR EXTENSION IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS.

VIDEO SYSTEM:

1. THE CONTRACTOR SHALL FURNISH AND INSTALL A 2"RIGID CONDUIT RISER FROM CABINET BOTTOM UP EXISTING SIGN STRUCTURE TO NEAR TOP OF OVERHEAD STRUCTURE. FLEXIBLE CONDUIT SHALL ONLY BE USED AS SHOWN. VIDEO CABLES ARE TO RUN INSIDE TUBULAR EXTENSION POLE TO VIDEO DEVICES. INSTALL WEATHER HEADS WITH A THREADED NIPPLE INSTALLED IN A THREADED COLLAR ON THE TUBULAR EXTENSION POLE JUST ABOVE THE CAMERA. THE THREADED COLLAR SHALL BE DESIGNED AND FABRICATED AT THE POINT OF POLE MANUFACTURE. FIELD DRILLING IS NOT PERMITTED. COST FOR VERTICAL CONDUIT (1"AND 2"), WEATHERHEADS, LB-LR CONDUIT STRAPS, AND SWEEPS SHALL BE INCLUDED IN THE BID PRICE FOR VIDEO CAMERA SENSOR ASSEMBLY OR CCTV SYSTEM.
2. ALL CABLE ENTRANCES BETWEEN THE CCTV/VDS CONTROLLER CABINET AND THE TUBULAR EXTENSION POLE SHALL BE BY GALVANIZED RIGID STEEL CONDUIT, UV-STABILIZED METALLIC LIQUID-TIGHT FLEXIBLE CONDUIT, OR LB OR SIMILAR CONDUIT BODY ALWAYS INSTALLED INTO THREADED COLLARS. RIGID COLLARS SHALL BE DESIGN AND FABRICATED AT THE POINT OF MANUFACTURE BY THE MANUFACTURER. STREET ELBOWS ARE NOT PERMITTED. FIELD DRILLING OF TUBULAR EXTENSION POLE IS NOT PERMITTED UNLESS SPECIFIED IN THE APPROVED SHOP DRAWINGS.
3. RISER CONDUIT BENDS, INCLUDING IN THE BASE OF THE CCTV/VDS EQUIPMENT CABINET, SHALL BE MADE ONLY BY LB OR SIMILAR CONDUIT BODIES AND THREADED NIPPLES.
4. SWEEPS SHALL ONLY BE USED AS SHOWN UNDERGROUND AT THE BASE OF THE OVERHEAD STRUCTURE.
5. ALL CONDUIT SHALL BE SECURED TO THE OVERHEAD STRUCTURE, FOUNDATION, AND TUBULAR EXTENSION AS PER NEC REQUIREMENTS. CONDUIT SHALL NOT EXTEND DIRECTLY FROM THE CABINET INTO THE GROUND.



GEORGIA
DEPARTMENT OF TRANSPORTATION

- NO SCALE -

REVISION DATES
09/01/2005
07/01/2006

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY
ATMS DETAILS

TUBULAR EXTENSION DETAIL
STEEL OR ALUMINUM

ITS-03
DRAWING No. 28-07

3/1/2007 GPLN