TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	HSIP-I-65-2(97)	2J

SPECIAL NOTES

SIGNALIZATION

(1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

(2) THE CONTRACTOR AND /OR POLE FABRICATOR SHALL DETERMINE THE SIZE AND DESIGN OF ALL STEEL SIGNAL SUPPORT POLE(S) AND FOUNDATION(S). SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND TO THE CITY OF BRENTWOOD FOR REVIEW AND APPROVAL PRIOR TO ORDERING. FOUNDATIONS ARE TO CONFORM TO TDOT STANDARD DRAWINGS.

(3) NEW TRAFFIC SIGNAL SUPPORT POLE(S) AND PEDESTRIAN PEDESTAL POLE(S) SHALL BE POWDER COATED BY THE MANUFACTURER WITH A BLACK GLOSS COLOR. THE POLES SHALL BE INSTALLED IN GOOD CONDITION WITHOUT VISIBLE DEFECTS. IN THE EVENT OF MINOR DAMAGE TO THE FINISH OF THE POLE, THE CONTRACTOR SHALL “TOUCH UP” THE POLE TO THE SATISFACTION OF THE CITY OF BRENTWOOD.

(4) ALL FOUNDATIONS FOR SIGNAL POLES AND THE CONTROLLER CABINET SHALL HAVE ONE SPARE THREE INCH CONDUIT STUB-OUT INSTALLED PARALLEL TO THE ROADWAY. ALL FOUNDATIONS FOR PEDESTRIAN PEDESTAL POLES SHALL INCLUDE ONE SPARE TWO INCH CONDUIT STUB-OUT INSTALLED PARALLEL TO THE ROADWAY. NO GROUT SHALL BE PLACED AT THE BASE OF THE STEEL POLE BETWEEN THE POLE BASE AND FOUNDATION. BASE OF POLE SHALL REMAIN OPEN TO PERMIT DRAINAGE AND AIR CIRCULATION.

(5) SIGNAL HEAD EQUIPMENT (I.E. FRAME AND ILLUMINATION TYPE) SHALL BE APPROVED BY THE CITY OF BRENTWOOD PRIOR TO INSTALLATION.

(6) ALL NEW TRAFFIC SIGNAL HEADS SHALL BE FABRICATED FROM ALUMINUM.

(7) THE ENTIRE SIGNAL HEAD AND/OR PEDESTRIAN SIGNAL HEAD SHALL BE BLACK IN COLOR.

(8) ALL VEHICLE SIGNAL HEADS SHALL HAVE A MULTI-PIECE, VACUUM-FORMED, BLACK PLASTIC, LOUVERED BACKPLATE.

(9) PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED USING “CLAMSHELL” TYPE HARDWARE.

(10) PEDESTRIAN PUSH BUTTONS SHALL BE MOUNTED 42 INCHES ABOVE LEVEL LANDING AT A MAXIMUM DISTNACE OF 10 INCHES FROM THE LANDING. PUSHBUTTONS SHALL BE ADA COMPLIANT WITH A 2 INCH BUTTON. WIRING FOR PEDESTRIAN PUSH-BUTTONS SHALL BE PROVIDED BY A SEPARATE CABLE FROM WIRING FOR THE PEDESTRIAN SIGNAL INDICATIONS.

(11) PEDESTRIAN PUSHBUTTONS AND SIGNS SHALL BE A SINGLE UNIT “PED PUSHBUTTON STATION”. NO “STICK ON” PEDESTRIAN SIGNS WILL BE ACCEPTED.

(12) VIDEO DETECTION CAMERAS SHALL BE INSTALLED IN ACCORDANCE WITH TDOT STANDARD DRAWING T-SG-3A UNLESS OTHERWISE NOTED.

(13) VIDEO LEAD-IN CABLES SHALL BE CONTINUOUS LENGTH RUNS FROM THE CAMERA TO THE TERMINATION POINT IN THE CABINET. SPLICES OF THE VIDEO CABLE SHALL NOT BE PERMITTED.

(14) CONTROLLER CABINET SHALL BE 8-PHASE NEMA TS2 TYPE 2 COMPLIANT AND SHALL ADHERE TO THE CURRENT CITY OF BRENTWOOD CABINET SPECIFICATIONS. CONTACT ROBBIE ALLEN AT (615) 371-0080 FOR CURRENT CITY SPECIFICATIONS. CONTROLLER CABINET FURNISHED BY THE CONTRACTOR SHALL BE COMPLETE WITH ALL INCIDENTAL AND AUXILIARY EQUIPMENT NECESSARY FOR INSTALLATION AND OPERATION WITHIN THE CITY OF BRENTWOOD’S CURRENT TRAFFIC SIGNAL SYSTEM. ALL WIRING AND EQUIPMENT NECESSARY TO ACTIVATE THE SIGNAL HEADS AND OPERATE THE TRAFFIC SIGNAL AS SPECIFIED SHALL BE PROVIDED AND INSTALLED BY THE CONTACTOR.

(15) CONTROLLER SHALL PROVIDE FULLY ACTUATED OPERATION, CONTAINING AN ETHERNET PORT FOR COMMUNICATIONS TO THE CITY NETWORK COMPLETE WITH ALL SOFTWARE, FIRMWARE AND CABINET CONNECTIONS TO ALLOW THE SIGNAL TO OPERATE IN THE EXISTING CITY OF BRENTWOOD FIBER OPTIC/ETHERNET SYSTEM.

(16) CONSTRUCT CONTROLLER CABINET IN ACCORDANCE WITH PLAN DETAILS. A NEMA TS2 TYPE 2 SIZE 6 CABINET AND FOUNDATION SHALL BE INSTALLED.

(17) COMPATIBILITY WITH MMU AND LOAD SWITCHES SHALL BE TESTED AND CONFIRMED.

(18) MANUFACTURER SHALL PROVIDE A FIVE-YEAR SERVICE WARRANTY FOR OPERATION OF THE CONTROLLER AND MMU.

(19) CONDUITS SHALL BE LAID AT A MINIMUM DEPTH OF 24 INCHES BELOW FINISHED GRADE AND SHALL COMPLY WITH TDOT TRENCHING DETAILS AND CONDUIT PLACEMENT.

(20) THE CONTRACTOR SHALL SEAL ALL OPEN CONDUIT ENTRANCE HOLES, WITH OR WITHOUT CABLES, WITH CONDUIT DUCT SEAL PUTTY. WHERE CABLES ENTER THE CONDUIT, THE SEALANT SHALL BE APPLIED AFTER INSTALLING THE CABLES. THESE LOCATIONS SHALL CONSIST OF CONDUIT ENDS AND PULL BOXES, CABINET BASES AND WEATHER HEADS.

(21) ALL OPEN CUTS AND TRENCH REPAIRS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CURRENT STANDARDS OF TDOT AND THE CITY OF BRENTWOOD.

(22) THE CONTRACTOR SHALL LABEL ALL CABLES IN THE CABINET, POLE/PEDESTAL BASES, AND PULL BOXES, USING THE CONVENTION OF TDOT STANDARD DRAWING T-SG-12. EACH WIRE SHALL BE IDENTIFIED BY A CIRCULAR PLASTIC TAG. 1 3/8 INCHES IN DIAMETER, WITH PRE-PRINTED LETTERING DIES WITH A MINIMUM ¼ INCH IN HEIGHT. TAGS SHALL BE PERMANENTLY FASTENED TO WIRE BY MEANS OF NYLON SELF-CLINCHING STRAPS. MARKING SHALL INDICATE “GND” FOR ALL GROUND AND GROUNDED NEUTRAL CONDUCTORS. COMPANION CIRCUIT CONDUCTORS SHALL BE MARKED “CKT” FOLLOWED BY THE DESIGNATED CHARACTERS AS SHOWN ON THE PLANS.

(23) THE CONTRACTOR SHALL OBTAIN AN ELECTRICAL PERMIT FROM THE CITY OF BRENTWOOD PRIOR TO BEGINNING CONSTRUCTION.

(24) CONTRACTOR SHALL INSTALL A 50 AMP, 2 POLE WEATHERPROOF EXTERNAL DISCONNECT ON THE POLE WITH A/C SERVICE CONNECTION. ENCLOSURE SHALL BE METALLIC WITH A 50 AMP SINGLE POLE BREAKER.

(25) STREET NAME SIGNS ARE TO BE ORDERED, PAID FOR AND INSTALLED BY THE CONTRACTOR. COORDINATE WITH CITY OF BRENTWOOD FOR SIZE, TYPE AND FONT PRIOR TO ORDERING. CONTACT ROBBIE ALLEN WITH THE CITY OF BRENTWOO AT (615) 371-0080.

(26) STREET NAME SIGNS SHALL BE MOUNTED TO MAST ARM USING CABLE CLAMPS AND STAND-OFF BRACKETS. BOLTING OR SCREWING SIGNS TO MAST ARM POLE WILL NOT BE ALLOWED.

(27) ALL CONSTRUCTION ACTIVITIES SHALL BE COMPLETED IN FULL COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND ARCHITECTURAL AND TRANSPORTATION BARRIERS COMPLIANCE BOARD, FEDERAL REGISTER 36 CFR PARTS 1190 AND 1191, ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; ARCHITECTURAL BARRIERS ACT (ABA) ACCESSIBILITY GUIDELINES; PROPOSED RULE, PUBLISHED IN THE FEDERAL REGISTER ON JULY 13, 2004.

(28) ALL ITEMS INSTALLED WITHIN THE PEDESTRIAN PART OF TRAVEL (I.E. SIDEWALK) SHALL COMPLY WITH THE STANDARD DETAILS OF THE CITY OF BRENTWOOD AND TDOT. THIS INCLUDES A MINIMUM PATH OF TRAVEL WIDTH OF 60 INCHES AND A PROTRUDING OBJECT LIMIT OF 4 INCHES IF MOUNTED AT A HEIGHT BETWEEN 27 INCHES AND 80 INCHES AND WITHIN THE PATH OF TRAVEL. VARIANCES MUST BE APPROVED BY THE CITY OF BRENTWOOD.

(29) ALL SIDEWALK AND RAMP REPAIRS SHALL COMPLY WITH CURRENT TDOT STANDARD DRAWINGS.

(30) THE CONTRACTOR SHALL INSTALL A BATTERY BACK-UP SYSTEM (BBS). THE BBS IS TO INCLUDE A PAD MOUNTED CABINET AS DETAILED IN THE PLANS. BBS CABINET SHALL BE MANUFACTURED BY TEMPLE, INC., DECATUR AL. AND SHALL INCLUDE.

- a. ONE 1011-4UPS/1700-UPS-FLBBS SHELL WITH GENERATOR PLUG
- b. ONE 11546 EIA BRACKET
- c. ONE SP2000PD-N UNINTERRUPTED TRAFFIC SYSTEM WITH NETWORK ADAPTER CARD SP-09A2
- d. ONE SPD-302C MANUAL BYPASS SWITCH
- e. ONE SP1901 BATTERY CABLE
- f. ONE ACP340 LED ARRESTOR
- g. ONE OP96C-41 BATTERY PACK, SET OF 8
- h. ONE NOTIFICATION LED LIGHT

SEALED BY

PETER FALKENBERG REGISTERED ENGINEER NO. 113705 STATE OF TENNESSEE

01/22/2014

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

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