

2009 ENGLISH TRAFFIC NOTES
TRAFFIC CONSTRUCTION PAY QUANTITY NOTES

Month/Year

REVISED February 19, 2014

- (TC-1) THE CONTRACTOR SHALL FURNISH AND INSTALL SUCH LIGHTS, SIGNS, BARRICADES, AND PROVIDE FLAGGERS NECESSARY FOR THE CONTROL, SAFETY, AND MAINTENANCE OF TRAFFIC WHEN INSTALLING, RELOCATING OR DELIVERING PORTABLE LONGITUDINAL BARRIER.
- (TC-2) QUANTITY INCLUDES SUFFICIENT LENGTH OF PORTABLE LONGITUDINAL BARRIER TO PROVIDE FOR THE LONGEST SECTION SHOWN ON THE PLANS. THIS SAME BARRIER WILL BE USED ON OTHER DETOUR PHASES.
- (TC-13) A PART, OR ALL, OF THIS ITEM IS INTENDED FOR REPLACEMENT OF REMOVED EXISTING CONFLICTING STRIPING.
- (TC-14) SEE STANDARD DRAWING PM1-1, PM2-1, PM3-1, PM4-1, PM5-1, PM6-1, PM7-1, PM8-1 (LATEST REVISION). A PART, OR ALL, OF THE QUANTITY SHOWN IS TO BE USED AS FINAL PAVEMENT MARKING.
- (TC-15) PAY QUANTITY SHALL MEET THE REQUIREMENTS OF ODOT SPECIFICATION SECTION 711.10 TRAFFIC STRIPE PAINT ACRYLIC WATERBORNE WITH THE EXCEPTION OF THE ACRYLIC EMULSION POLYMER SHALL BE ROHM AND HASS HD-21A OR DOW CHEMICAL DT-400. **(NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED ON INTERSTATE OR EXPRESSWAY PROJECTS WITH CONSTRUCTION DAYS GREATER THAN 12 MONTHS)**
- (TC-16) PAINT SHALL CONFORM TO SECTION 711 "TRAFFIC STRIPE", OF THE O.D.O.T. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).
- IF CONSTRUCTION TRAFFIC STRIPE PAINT IS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND FAILS DURING THE FIRST SIX MONTHS OF SERVICE, REPLACEMENT WILL BE MADE AT THE CONTRACTOR'S EXPENSE AND SHALL BE ACCOMPLISHED IN A TIMELY MANNER UPON NOTIFICATION BY THE ENGINEER OF SUCH FAILURE. **(NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED ON ROADWAY PROJECTS WITH ADT GREATER THAN 10,000)**
- (TC-17) INCLUDES AN ESTIMATED _____ L.F. (PAINT) (4" WIDE) WHITE _____ L.F. (PAINT)(4" WIDE) YELLOW STRIPE.
- (TC-19) THIS ITEM INCLUDES AN ESTIMATED _____ L.F. (4" WIDE) WHITE AND _____ L.F. (4" WIDE) YELLOW STRIPE. THE CONTRACTOR SHALL PROVIDE AND INSTALL AN O.D.O.T. APPROVED REMOVABLE PAVEMENT MARKING TAPE. COST FOR REMOVAL OF THIS TAPE SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NON-REMOVABLE MARKING TAPE (FOIL BACK) SHALL NOT BE CONSIDERED AN APPROVED EQUAL FOR THIS ITEM.
- (TC-20) ALL STRIPING TO BE PLACED ON TEMPORARY SURFACES OR ON SURFACES SCHEDULED TO BE REMOVED SHALL BE DONE WITH PAINT UNLESS OTHERWISE NOTED ON THE PLANS OR STANDARD DRAWINGS. TEMPORARY PAVEMENT MARKINGS PLACED ON FINISHED PAVEMENT OR EXISTING PAVEMENT TO REMAIN IN PLACE SHALL USE ONE OF THE FOLLOWING METHODS:
- REMOVABLE PAVEMENT MARKING TAPE
 - CLASS A PAVEMENT MARKERS
- (TC-21) INCLUDED IN THE COST OF THIS ITEM SHALL BE INSTALLATION, MAINTENANCE, AND REMOVAL. THIS ITEM SHALL BE BID ACCORDINGLY.
- (TC-22) AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT

MARKING REMOVAL SHALL INCLUDE THE COST OF REMOVING STRIPE, ARROWS, WORDS AND SYMBOLS, AS SHOWN IN THE PLANS. THESE ITEMS MAY CONSIST OF PLASTIC, PAINT OR NON-REMOVABLE MARKING TAPE.

(TC-23) QUANTITY SHOWN FOR THIS ITEM INCLUDES THOSE SIGNS WHICH COMPRISE THE ROUTE MARKER ASSEMBLIES USED TO INDICATE THE DETOUR ROUTE.

(TC-24) QUANTITIES SHOWN FOR CONSTRUCTION SIGNING AND STRIPING HAVE BEEN INCREASED TO ALLOW FOR TRAFFIC CONTROL ON CROSS STREETS NOT SHOWN ON THE PLANS.

8/2013

(TC-25) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES AND PAVEMENT MARKINGS REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES, WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS. **(NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED WHEN TRAFFIC CONTROL IS A LUMP SUM PAY ITEM.)**

(TC-25a) THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK. **(NOTE IS TO BE USED FOR FIELD MAINTENANCE PROJECTS.)**

8/2013

(TC-26) ALL CONSTRUCTION TRAFFIC CONTROL WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS, AND INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS. PRICE BID FOR THIS ITEM SHALL BE PAYMENT IN FULL FOR THE INSTALLATION, MAINTENANCE AND SUBSEQUENT REMOVAL OF ALL NECESSARY CONSTRUCTION TRAFFIC CONTROL DEVICES REQUIRED FOR COMPLETION OF THE PROJECT.

ALL SIGNS AND BARRICADES WHICH ARE SHOWN WITH TYPE 'A' LIGHTS IN THE STANDARD DRAWINGS SHALL HAVE THE CORRESPONDING LIGHT ATTACHED DURING NON-DAYLIGHT HOURS. **(NOTE FOR CONSULTANT OR DESIGNER: THIS NOTE SHALL BE USED WHEN TRAFFIC CONTROL IS A SIGN DAY PAY ITEM.)**

(TC-27) WHEN A PILOT CAR IS REQUIRED ON TWO LANE / TWO-WAY ROADWAYS, THE CONTRACTOR SHALL USE A PILOT CAR WITH A LICENSED OPERATOR. THE PILOT CAR OPERATOR SHALL BE IN RADIO CONTACT WITH PERSONNEL IN THE TEMPORARY TRAFFIC CONTROL ZONE. MAXIMUM SPEED OF THE PILOT CAR THROUGH THE WORK ZONE AREA SHALL BE 25 MPH. FULL COMPENSATION FOR FURNISHING AND OPERATING THE PILOT CAR (INCLUDING DRIVER, RADIO, AND ANY OTHER EQUIPMENT OR LABOR REQUIRED) SHALL BE INCLUDED IN THE PRICE BID OF PILOT CAR.

PILOT CAR SHALL BE APPROVED VEHICLE, SHOULD CARRY THE CONTRACTOR'S INSIGNIA, AND BE EQUIPPED WITH SIGNS READING "PILOT CAR—FOLLOW ME" MOUNTED A MINIMUM OF ONE (1) FOOT ABOVE THE TOP OF THE VEHICLE AND CLEARLY VISIBLE FROM BOTH DIRECTIONS.

(TC-28) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 0.00 S.F. AND 6.25 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.

- (TC-29) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 6.26 S.F. AND 15.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-30) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE BETWEEN 16.00 S.F. AND 32.99 S.F. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-31) INCLUDED IN THIS ITEM ARE ALL S.C.S. (SPECIAL CONSTRUCTION SIGNING) SIGNS WHICH ARE 33.0 S.F. AND OVER. ALSO INCLUDED IN THIS ITEM SHALL BE THE COST OF INSTALLATION, MAINTENANCE, AND REMOVAL OF THESE SIGNS.
- (TC-32) SPECIAL CONSTRUCTION SIGNS 33.0 S.F. AND OVER SHALL BE CONSTRUCTED OF EXTRUDED ALUMINUM TO THE DIMENSIONS SHOWN ON THE PLANS. THE SIGNS SHALL BE INSTALLED EITHER ON WIDE FLANGE BEAM POSTS OR OVERHEAD SIGN STRUCTURES IN A MANNER APPROVED BY THE ENGINEER.
- (TC-33) ALL CONSTRUCTION WORK ZONE SIGNS SHALL HAVE FLUORESCENT SHEETING. THE FLUORESCENT SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956 (LATEST REVISION)

THE MANUFACTURER SHALL FURNISH A TYPE 'D' CERTIFICATION IN ACCORDANCE WITH O.D.O.T. STANDARD SPECIFICATIONS (CURRENT EDITION) SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON MATERIAL SUBMITTED FOR APPROVAL.

(TC-35) DELETED

(TC-36) DELETED

6/2013

(TC-39) THE CONTRACTOR SHALL PROVIDE A PERSON, 24 HOURS A DAY, SEVEN DAYS A WEEK, AT THE CONSTRUCTION SITE TO MAINTAIN AND KEEP ALL TRAFFIC CONTROL DEVICES IN POSITION ANYTIME TRAFFIC IS DIRECTED AWAY FROM THE NORMAL TRAFFIC LANES OR ANYTIME THE ENGINEER DEEMS IT NECESSARY. THIS PERSON SHALL HOLD A CURRENT CERTIFICATION FROM THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) OR THE OKLAHOMA TRAFFIC ENGINEERING ASSOCIATION (OTEA) AS A TRAFFIC CONTROL TECHNICIAN OR TRAFFIC CONTROL SUPERVISOR.

(TC-40) DELETED

(TC-44) PRICE BID FOR THIS ITEM SHALL INCLUDE ATTENUATOR MODULES, SAND, WOODEN PALLETS (IF REQUIRED), RELOCATION, AND MAINTENANCE.

(TC-45) INCLUDED IN THIS ITEM SHALL BE _____ SAND FILLED MODULES TO BE USED FOR _____ DAYS. THESE MODULES SHALL BE PLACED WHERE SHOWN IN THE PLANS OR ON THE STANDARD DRAWINGS AND INSTALLED AS SHOWN IN THE STANDARD DRAWINGS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

(TC-47) ANY REPLACEMENT PACKAGES OR REPLACEMENT MODULES INTENDED TO BE USED TO REPLACE PERMANENT ATTENUATORS SHALL, UPON COMPLETION OF THE PROJECT, BECOME PROPERTY OF THE STATE AND DELIVERED TO A LOCATION SELECTED BY THE ENGINEER.

(TC-50) DELETED

(TC-52) ANY USED _____ * _____ TO BE PLACED ON THIS PROJECT SHALL BE SUBJECT TO INSPECTION AND APPROVAL, BY THE OKLAHOMA DEPARTMENT OF TRANSPORTATION, TO ASSURE THAT THEY ARE IN GOOD WORKING CONDITION, PRIOR TO PLACEMENT ON THE PROJECT.

- * TRUCK MOUNTED ATTENUATOR
- CHANGEABLE MESSAGE SIGN
- CONSTRUCTION ZONE IMPACT ATTENUATOR
- SAND FILLED IMPACT ATTENUATOR

(TC-58) INCLUDED IN THIS ITEM IS THE COST OF PROVIDING TWO (2) FLAGGERS FOR A 24 HOUR PERIOD OF TIME. DURING NON-DAYLIGHT HOURS THE FLAGGER STATIONS SHALL BE ADEQUATELY LIGHTED TO PROVIDE A SAFE WORK AREA FOR FLAGGERS. COST OF THIS LIGHTING WILL BE INCLUDED IN THE PRICE BID FOR FLAGGER.

(TC-60) DELETED

(TC-61) ANY DAMAGE TO A FINISHED OR EXISTING SURFACE RESULTING FROM THE CONTRACTORS NEGLIGENCE IN THE REMOVAL OF CONSTRUCTION ZONE PAVEMENT MARKERS OR CHANNELIZING DEVICES AND THE BITUMINOUS ADHESIVE USED IN THEIR INSTALLATION, SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND TO THE SATISFACTION OF THE ENGINEER.

(TC-65) THE PRICE BID FOR THIS ITEM SHALL INCLUDE THE FOLLOWING:

- A. ONE OFFICIALLY MARKED OKLAHOMA HIGHWAY PATROL CAR (WHEN PROJECT INVOLVES A STATE OR FEDERAL HIGHWAY). IF AN OKLAHOMA HIGHWAY PATROL CAR IS NOT AVAILABLE, THEN A LOCAL CITY OR COUNTY LAW ENFORCEMENT VEHICLE IS TO BE USED. PRICE BID FOR THIS ITEM SHALL BE PAID ON A PER UNIT PER HOUR BASIS.
- B. ONE OKLAHOMA HIGHWAY LAW ENFORCEMENT OFFICER WITH JURISDICTIONAL AUTHORITY TO WRITE AND ISSUE TRAFFIC CITATIONS. IF AN OKLAHOMA HIGHWAY PATROL LAW OFFICER IS NOT AVAILABLE, THEN A LOCAL CITY OR COUNTY LAW ENFORCEMENT OFFICER IS TO BE USED. THE LAW ENFORCEMENT OFFICER SHALL BE INSURED, LICENSED AND BONDED, IF REQUIRED, BY THE CONTRACTOR. THIS OFFICER SHALL BE SPECIFICALLY APPROVED AND ASSIGNED TO THIS WORK ACTIVITY.
- C. THE CONTRACTOR SHALL MAKE ALL THE NECESSARY ARRANGEMENTS WITH THE OKLAHOMA HIGHWAY PATROL OR THE LAW ENFORCEMENT AGENCY TO PROVIDE THE REQUIRED LAW ENFORCEMENT ON THIS PROJECT.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS ANTICIPATED WEEKLY SCHEDULE TO THE OKLAHOMA HIGHWAY PATROL OR THE LOCAL LAW AGENCY TWO WEEKS IN ADVANCE OF THE WORK. THE WORK SCHEDULE WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
- E. THE OKLAHOMA HIGHWAY PATROL OR THE LOCAL LAW ENFORCEMENT AGENCY WILL BE PAID FOR A MAXIMUM OF ONE (1) HOUR, PER WORK PERIOD, TO ALLOW FOR TRAVEL TO AND FROM THE OFFICER'S PERMANENT DUTY STATION AND THE WORK SITE. THIS WILL BE PAID ONE (1) TIME PER WORK PERIOD AS DEFINED BY THE CONTRACTOR IN AGREEMENT WITH THE ENGINEER.

(TC-68) TO BECOME THE PROPERTY OF THE _____ * _____ UPON COMPLETION OF THE PROJECT.

- * OKLAHOMA DEPARTMENT OF TRANSPORTATION
- CONTRACTOR

(TC-69) DELETED

- (TC-70) THIS ITEM IS AN ESTIMATED QUANTITY TO BE USED AS DEEMED NECESSARY BY THE ENGINEER.
- (TC-71) DELETED
- (TC-73) QUANTITY SHOWN INCLUDES _____ EA. (WHITE) AND _____ EA. (YELLOW) CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TABS). THESE CONSTRUCTION ZONE PAVEMENT MARKERS SHALL BE EITHER "DAVIDSON PLASTICS: MODEL TOM", OR AN APPROVED EQUAL. PRICE BID FOR THIS ITEM SHALL INCLUDE THE INITIAL PLACEMENT, SUBSEQUENT REPLACEMENT, AND REMOVAL. THE CONSTRUCTION ZONE PAVEMENT MARKERS (FLEX TABS) SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON STANDARD DRAWING TCS21-1-(LATEST REVISION).
- (TC-74) DELETED
- (TC-75) TEMPORARY PAVEMENT MARKINGS SHALL BE IN PLACE THE SAME DAY THAT EXISTING PAVEMENT MARKINGS ARE REMOVED FROM ANY ROADWAY OPEN TO TRAFFIC. ALSO, ALL TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO THE INSTALLATION OF FINAL STRIPING.
- (TC-76) ANY TRUCK MOUNTED ATTENUATOR USED ON THIS PROJECT SHALL HAVE PASSED ALL MANDATORY AND OPTIONAL TESTS LISTED IN NCHRP 350, TL-3 CRITERIA. THIS ITEM IS TO BE USED WHERE SHOWN IN THE STANDARD DRAWINGS OR AT THE DISCRETION OF THE ENGINEER ON SHADOW VEHICLES PROTECTING THE WORK AREAS AND TEMPORARY ROADSIDE HAZARDS.
- (TC-77) TRUCK MOUNTED ATTENUATORS ARE TO BE INSTALLED ON NON-STATE OWNED TRUCKS HAVING A MINIMUM GROSS WEIGHT RATING OF 15,000 POUNDS. EACH OF THESE TRUCKS SHALL ALSO BE EQUIPPED WITH AN ARROW DISPLAY (TYPE B).
- (TC-78) REPLACEMENT MODULES FOR TRUCK MOUNTED ATTENUATORS SHALL CORRESPOND TO THE BRAND AND MODEL OF THE UNIT PURCHASED FOR USE ON THIS PROJECT. UPON COMPLETION OF THE PROJECT, THESE REPLACEMENT MODULES SHALL BECOME THE PROPERTY OF THE STATE AND BE DELIVERED TO A STORAGE LOCATION DESIGNATED BY THE ENGINEER.
- (TC-79) DELETED
- (TC-80) INCLUDED IN THIS ITEM SHALL BE ONE (1) ADDITIONAL UNIT TO BE USED AS A STAND-BY OR REPLACEMENT. THIS STAND-BY UNIT SHALL BE IMMEDIATELY ACCESSIBLE TO REPLACE A DAMAGED, STOLEN OR MALFUNCTIONING UNIT. THE AMOUNT OF TIME BETWEEN THE REMOVAL OF THE DAMAGED UNIT AND THE INSTALLATION OF THE STAND-BY UNIT SHALL BE NO MORE THAN TWENTY-FOUR (24) HOURS.
- (TC-81) DELETED
- (TC-84) _____ CONSTRUCTION CALENDAR DAYS WERE USED TO COMPUTE THE SIGN DAY PAY ITEMS. THE AMOUNT OF CALENDAR DAYS USED TO COMPUTE THE SIGN DAY PAY ITEMS IS AN ESTIMATED QUANTITY ONLY, BASED ON THE CURRENT O.D.O.T. STANDARDS AND SUGGESTED CONSTRUCTION SEQUENCE FOR THIS PROJECT. THESE ESTIMATED SIGN DAY QUANTITIES MAY CHANGE AS THE PROJECT'S CONSTRUCTION TRAFFIC CONTROL IS MODIFIED DURING CONSTRUCTION.
- (TC-85) THESE SIGNS MUST BE ON THE OKLAHOMA DEPARTMENT OF TRANSPORTATION LIST OF APPROVED CHANGEABLE MESSAGE SIGNS. FOR A LIST OF THE APPROVED SIGNS GO TO THE OKLAHOMA DEPARTMENT OF TRANSPORTATION WEBSITE AT:
<http://www.okladot.state.ok.us/traffic/qpl/index.php>

TRAFFIC OPERATIONS GENERAL CONSTRUCTION NOTES

(C-1) ANY SIGNS AND/OR DELINEATORS WHICH ARE TO BE REMOVED DURING THIS PROJECT WILL BE STORED IN A PROTECTED AREA DESIGNATED BY THE RESIDENT ENGINEER, UNTIL SUCH A TIME THAT THEY ARE TO BE RESET BY THE CONTRACTOR. COST OF THIS WORK TO BE INCLUDED IN OTHER ITEMS OF WORK.

8/2013

(C-2) EXISTING ROADWAY SHALL REMAIN OPEN DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER BARRICADES, LIGHTS, AND SIGNING WITHIN THE LIMITS OF CONSTRUCTION. ALL CONSTRUCTION SIGNING WILL BE IMPLEMENTED ACCORDING TO CONSTRUCTION PLANS. CONSTRUCTION TRAFFIC CONTROL WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (CURRENT EDITION), AND COMPLIANT WITH APPLICABLE O.D.O.T. STANDARD DRAWINGS.

(C-3) THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES.

(C-4) FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION ON THIS PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL, SIZE AND WEIGHTS SECTION (405)-425-2210 AND ADVISE THE OFFICE WHEN SAID DETOURING WILL BEGIN AND THAT WIDE LOADS OVER _____ FT. SHOULD BE ADVISED AND RESTRICTED. UPON COMPLETION OF THE PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL AND ADVISE THE OFFICE THAT THE PROJECT IS COMPLETE.

(C-5) FIVE (5) WORKING DAYS PRIOR TO DETOURING WIDE LOAD VEHICLES, FOR THE CONSTRUCTION OF THE PROJECT, THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL, SIZE AND WEIGHTS SECTION (405)-425-2210 AND ADVISE THE OFFICE WHEN SAID DETOURING WILL BEGIN AND THAT WIDE LOADS OVER _____ FT. SHOULD BE ADVISED AND RESTRICTED (SEE PLANS FOR PROPOSED WIDE LOAD DETOUR ROUTE). UPON COMPLETION OF THE PROJECT THE RESIDENT ENGINEER SHALL CONTACT THE OKLAHOMA HIGHWAY PATROL AND ADVISE THE OFFICE THAT THE WIDE LOAD DETOUR IS NO LONGER IN EFFECT.

2/2014

(C-6) THE STRUCTURAL DESIGN OF ALL POLES, MAST ARMS, HIGH-MAST POLES, AND OTHER SUPPORTS FOR SIGNS, LUMINAIRES, AND SIGNALS AS WELL AS THEIR CONNECTIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO *STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS*. THE MANUFACTURER SHALL ENSURE THE FOLLOWING ARE APPLIED TO THE DESIGN:

THE MINIMUM DESIGN WIND SPEED AND DESIGN LIFE AS REQUIRED IN THE AASHTO SPECIFICATIONS;

THE CALCULATED STRESSES AND FORCES FROM THE DESIGN LOADINGS DO NOT EXCEED THOSE REQUIRED IN THE AASHTO SPECIFICATIONS;

A CATEGORY I FATIGUE IMPORTANCE FACTOR (I_F) FOR ALL STRUCTURES; NO VIBRATORY MITIGATION SHALL BE ALLOWED. TRUCK-INDUCED GUSTS SHALL BE APPLIED TO ALL OVERHEAD TRAFFIC SIGNAL SUPPORTS.

ALL MEMBERS ARE AT LEAST THE MINIMUM THICKNESS AS REQUIRED IN THE AASHTO SPECIFICATIONS;

LUMINAIRE MAST ARMS SHALL BE DESIGNED TO SUPPORT AT LEAST A 50 LB. (22.7 KG) LUMINAIRE WITH AN EFFECTIVE PROJECTED AREA OF 2.5 FT² (0.23 M²);

THE ANCHOR BOLT DESIGN AND AMOUNT OF ANCHOR BOLTS TO BE USED SHALL BE AS REQUIRED IN THE AASHTO SPECIFICATIONS.

SIGNAL MAST ARMS AND POLES SHALL BE DESIGNED FOR SPECIFIC SIGNAL HEAD AND SIGN PLACEMENT.

UNLESS SITE SPECIFIC GEOTECHNICAL DATA IS AVAILABLE, FOUNDATIONS SHALL BE DESIGNED UTILIZING THESE PARAMETERS; SHEAR STRENGTH OF COHESIVE SOIL (C) OF 500 PSF, ANGLE OF INTERNAL FRICTION (Φ) OF 22 DEGREES, AND EFFECTIVE UNIT WEIGHT OF SOIL (Γ) OF 120 PCF.

MINIMUM HAND HOLE SIZE OF 3 INCH WIDTH BY 5 INCH HEIGHT.

TRAFFIC SIGNING PAY QUANTITY NOTES

- (TS-1) "REMOVAL OF SIGN FOOTINGS" SHALL MEAN THE REMOVAL OF AN EXISTING FOOTING WITH OR WITHOUT STUBS AND SHALL BE DISPOSED OF AS NOTED IN GENERAL CONSTRUCTION NOTES.
- (TS-4) DELETED
- (TS-5) DELETED
- (TS-6) SHOP DRAWINGS FOR ATTACHING SIGNS TO LIGHT AND/OR SIGNAL POLES AND MAST ARMS SHALL BE SUBMITTED TO THE TRAFFIC ENGINEER FOR APPROVAL BEFORE FABRICATION. NO HOLES SHALL BE PERMITTED IN ANY LIGHT AND/OR SIGNAL POLE OR MAST ARM. THE PRICE BID SHALL INCLUDE ALL MATERIALS, LABOR, HARDWARE AND INCIDENTALS NECESSARY TO COMPLETE THE WORK AS DESCRIBED.
- (TS-7) DELETED
- (TS-9) LENGTH OF BRIDGE MOUNTED SIGN STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR'S FIELD SURVEY, PRIOR TO CONSTRUCTION.
- (TS-10) DELETED
- (TS-11) QUANTITY SHOWN INCLUDES _____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND _____ L.F. TRAFFIC STRIPE (PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE. THIS STRIPE SHALL BE APPLIED AT A THICKNESS OF 70 MILS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND APPROVAL BY THE ENGINEER.
- (TS-12) QUANTITY SHOWN INCLUDES _____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE. THIS STRIPE SHALL BE APPLIED AT A THICKNESS OF 70 MILS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND APPROVAL BY THE ENGINEER.
- (TS-13) QUANTITY SHOWN INCLUDES _____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND _____ L.F. TRAFFIC STRIPE(PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE. THIS STRIPE SHALL BE APPLIED AT A THICKNESS OF 70 MILS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND APPROVAL BY THE ENGINEER.
- (TS-14) QUANTITY SHOWN INCLUDES _____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE. THIS STRIPE SHALL BE APPLIED AT A THICKNESS OF 70 MILS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND APPROVAL BY THE ENGINEER.

- (TS-15) QUANTITY SHOWN INCLUDES _____ L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND _____ L.F. TRAFFIC STRIPE (PAINT)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE
- (TS-16) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.
- (TS-17) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND _____ L.F. TRAFFIC STRIPE(PAINT)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.
- (TS-18) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PAINT)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.
- (TS-19) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND _____ L.F. TRAFFIC STRIPE(PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.
- (TS-20) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.
- (TS-21) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND _____ L.F. TRAFFIC STRIPE(PLASTIC)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.
- (TS-22) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND _____ L.F. TRAFFIC STRIPE(PLASTIC)(YELLOW) WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.
- (TS-23) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (PLASTIC)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.
- (TS-24) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND _____ L.F. TRAFFIC STRIPE(MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF FOUR INCH (4") WIDE TRAFFIC STRIPE.
- (TS-25) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND _____ L.F. TRAFFIC STRIPE(MULTI-POLYMER)(BLACK) AND WILL BE MEASURED BY THE LINEAR FOOT OF SIX INCH (6") WIDE TRAFFIC STRIPE.
- (TS-26) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND _____ L.F. TRAFFIC STRIPE(MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF EIGHT INCH (8") WIDE TRAFFIC STRIPE.
- (TS-27) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND _____ L.F. TRAFFIC STRIPE(MULTI-POLYMER)(YELLOW) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWELVE INCH (12") WIDE TRAFFIC STRIPE.
- (TS-28) QUANTITY SHOWN INCLUDES ____ L.F. TRAFFIC STRIPE (MULTI-POLYMER)(WHITE) AND WILL BE MEASURED BY THE LINEAR FOOT OF TWENTY-FOUR INCH (24") WIDE TRAFFIC STRIPE.
- (TS-29) DELETED
- (TS-30) DELETED
- (TS-31) DELETED
- (TS-32) THE AMOUNT SHOWN IS AN APPROXIMATION AND THE ACTUAL AMOUNT OF REMOVAL, IF NECESSARY, SHALL BE DETERMINED BY THE ENGINEER. PRICE BID FOR PAVEMENT MARKING REMOVAL (TRAFFIC STRIPE) SHALL INCLUDE COST OF REMOVAL OF ARROWS,

WORDS, AND SYMBOLS. THE PAVEMENT MARKING TO BE REMOVED SHALL BE CONSIDERED THERMOPLASTIC AND BID ACCORDINGLY.

DURING REMOVAL OF EXISTING STRIPING AND REPLACEMENT WITH NEW STRIPING, PERMANENT STRIPING SHALL BE REPLACED WITHIN 48 HOURS AFTER OLD STRIPING IS REMOVED.

- (TS-33) INCLUDED IN THIS PAY ITEM IS ALL HARDWARE ASSOCIATED WITH PROPERLY ANCHORING AND MOUNTING THE HIGHWAY SIGN IN ACCORDANCE WITH O.D.O.T. PLANS AND STANDARD DRAWINGS SSA1-1 AND SSP1-1-(LATEST REVISION).
- (TS-34) INCLUDED IN THIS PAY ITEM IS THE REMOVAL OF ANY EXISTING SIGNS TO BE REPLACED BY NEW ASSEMBLIES AND THE REMOVAL OF ANY EXISTING SIGNS THAT WILL BE IN CONFLICT WITH THE NEW ROADWAY OR NEW SIGNAGE.
- (TS-35) SEE STANDARD DRAWING IA1-1-(LATEST REVISION), OR MIA1-1-(LATEST REVISION) FOR CONCRETE PAD DESIGN.
- (TS-36) PRICE BID FOR SAND FILLED IMPACT ATTENUATOR(S) SHALL INCLUDE THE COST FOR OM1-1 OR OM1-3 SIGN(S) WITH TYPE VIII SHEETING, AND THE REMOVAL OF ANY OM-3, OR OM-3E SIGN(S), POST(S) AND FOOTING(S), IF PRESENT, AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION ACCORDING TO PERTINENT O.D.O.T. STANDARD DRAWINGS.
- (TS-37) THIS ITEM IS NON-PARTICIPATING. THE CONTRACTOR SHALL FURNISH THE NUMBER OF REPLACEMENT MODULES AS SPECIFIED BELOW.

200 LB.	_____	1400 LB.	_____
400 LB.	_____	2100 LB.	_____
700 LB.	_____		
- (TS-38) DELETED
- (TS-39) OVERHEAD SIGN STRUCTURES AND SIGNS THAT ARE TO BE REMOVED, RESET, AND/OR RELOCATED SHALL BE CAREFULLY REMOVED BY THE CONTRACTOR AND STORED AT A SITE SELECTED BY THE ENGINEER. ANY DAMAGE TO THE STRUCTURES OR SIGNS DURING THE REMOVAL, TRANSPORTATION, STORAGE, RESETTING, AND/OR RELOCATION OF THE STRUCTURE OR SIGN SHALL BE REPAIRED BY, AND AT THE EXPENSE OF THE CONTRACTOR.
- (TS-40) OVERHEAD STRUCTURE TYPE ____ (____ FT. LONG) LOCATED AT STATION _____. ALL WELDS ON OVERHEAD STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NECESSARY. MATERIALS AND WELDING TO CONFORM TO THE 2009 OKLAHOMA STANDARD SPECIFICATIONS AND IN A MANNER APPROVED BY THE ENGINEER.
- (TS-41) "REMOVAL OF EXISTING SIGNS" SHALL INCLUDE THE REMOVAL OF A COMPLETE SIGN ASSEMBLY WHICH MAY INCLUDE MULTIPLE SIGNS, POSTS, FOOTINGS, AND ANY FOOTINGS ADJACENT TO THE SIGN ASSEMBLY. WHEN APPROVED BY THE ENGINEER, FOOTINGS MAY BE OBLITERATED TO A POINT BELOW GROUND LEVEL IN LIEU OF BEING COMPLETELY REMOVED. SEE GENERAL CONSTRUCTION NOTES FOR DISPOSAL OF OLD CONCRETE FOOTING MATERIAL.
- (TS-42) DELETED

TRAFFIC SIGNING GENERAL CONSTRUCTION NOTES

- (C-51) REMOVED MATERIAL TO BECOME PROPERTY OF CONTRACTOR AND IT SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.
- (C-52) THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO LOCAL AND THROUGH TRAFFIC. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

(C-53) ANY DAMAGE CAUSED BY THE CONTRACTOR TO ANY STRUCTURES, ROADWAY SURFACES, STRIPING, RAISED PAVEMENT MARKERS, GUARDRAIL, SLOPES, AND SIGNS SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER.

(C-54) THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING TRAFFIC ON CROSS STREETS. A MINIMUM OF ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES. SEE O.D.O.T. STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

(C-55) DELETED

(C-56) ALL REGULATORY SIGNS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL WARNING SIGNS SHALL HAVE FLUORESCENT YELLOW SHEETING. THE FLUORESCENT YELLOW SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) REQUIREMENTS FOR TYPE VIII SHEETING.

ALL GREEN AND BLUE SIGNS ON CONVENTIONAL HIGHWAYS SHALL HAVE HIGH INTENSITY SHEETING. THE HIGH INTENSITY SHEETING SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION) FOR TYPE III SHEETING.

ALL PANEL AND OVERHEAD SIGNS SHALL HAVE TYPE III HIGH INTENSITY BACKGROUND WITH TYPE VIII LEGENDS AND BORDERS. THE TYPE III BACKGROUND AND THE TYPE VIII LEGENDS AND BORDERS SHALL MEET THE REQUIREMENTS OF ASTM D4956-(LATEST REVISION).

THE MANUFACTURER SHALL FURNISH A TYPE 'A' CERTIFICATION IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS, LATEST EDITION, and SUBSECTION 106.04. THE CERTIFICATION SHALL INCLUDE TEST RESULTS ON THE MATERIAL SUBMITTED FOR APPROVAL.

(C-57) ALL BROKEN CONCRETE INCLUDING OLD SIGN FOOTINGS WITH STUBS, WASTE MATERIAL AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT SHALL BE MADE FOR THE DISPOSAL OF THIS MATERIAL. ANY PIPE POST OR WIDE FLANGE POST ABOVE THE OLD SIGN FOOTINGS SHALL BE CUT AND HANDLED AS PROPERTY OF THE STATE AND SHALL BE NEATLY STACKED ON THE JOB SITE, AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.

(C-58) NO SPLICES SHALL BE PERMITTED IN ANY PIPE OR WIDE FLANGE SIGN POSTS.

(C-59) ALL ANCHOR BOLTS SHALL BE GRADE A-36 STEEL.

(C-60) THE STATIONS AND LOCATIONS OF THE SIGN PLACEMENT, AS SHOWN ON THE PLAN SHEETS, ARE APPROXIMATE. EXACT STATIONS AND LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR SO THAT THE SIGN IS INSTALLED IN ACCORDANCE WITH DEPARTMENT STANDARDS AND THE MUTCD IN ORDER TO PROVIDE OPTIMUM VISIBILITY TO THE ONCOMING/APPROACHING MOTORIST. IF A PROPOSED LOCATION CONFLICTS WITH OTHER SIGNS, UTILITIES OR OTHER ROADWAY FEATURES, THE ENGINEER SHALL BE NOTIFIED.

(C-61) POST LENGTHS SHOWN ON SIGN SUMMARY ARE APPROXIMATE, EXACT LENGTH SHALL BE DETERMINED BY FIELD SURVEY BY THE CONTRACTOR.

- (C-62) THE COST OF REPLACEMENT OF MISSING OR DAMAGED EDGE STRIP ON EXISTING SIGNS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-63) ALL EXISTING AND NEW BREAKAWAY SIGN POSTS, PIPES AND WIDE FLANGE BEAMS SHALL HAVE SHEET METAL BOLT RETAINER PLATES AS SPECIFIED IN O.D.O.T. STD. FGS1-1-(LATEST REVISION). REPLACEMENT COST OF MISSING OR DAMAGED BOLT RETAINER PLATES AND ALL ASSOCIATED HARDWARE AND LABOR SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-65) ALL REMOVED SIGNS, SIGN POSTS, BOLTS, MISCELLANEOUS HARDWARE, AND DELINEATORS SHALL REMAIN THE PROPERTY OF THE STATE. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DESIGNATED BY THE ENGINEER UNTIL SUCH TIME AS DIVISION PERSONNEL CAN REMOVE THE MATERIAL FROM THE JOB SITE.
- (C-66) ALL SIGNS SHALL BE REMOVED FROM THE POSTS IN A SALVAGEABLE MANNER FOR REUSE. CARE SHALL BE TAKEN DURING REMOVAL AND TRANSPORTING TO ALLEVIATE DAMAGE OF MATERIALS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED DURING REMOVAL OF SIGNS AND SIGN POSTS.
- (C-67) THE REMOVAL OF SIGN FOOTINGS IN CONCRETE ISLANDS SHALL BE REMOVED IN A MANNER APPROVED BY THE ENGINEER. AFTER REMOVAL, THE HOLES SHALL BE PATCHED WITH CONCRETE. THE NEW LOCATION OF SIGN FOOTINGS IN CONCRETE ISLANDS SHALL BE SAWED IN A MANNER APPROVED BY THE ENGINEER. CONCRETE PATCHING, SAWING, LABOR, AND ALL OTHER ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-68) AFTER REMOVAL OF ANY SIGN FOOTINGS, THE HOLES SHALL BE FILLED WITH SOIL AND TAMPED AND SHAPED IN A MANNER APPROVED BY THE ENGINEER.
- (C-69) FOR NEW OR EXISTING GROUND MOUNTED SIGNS, MAXIMUM STUB POST PROJECTION ABOVE FOOTING/GROUND LINE SHALL BE 1-3/4" +/- 1/4". MAXIMUM FOOTING PROJECTION ABOVE GROUND LINE SHALL BE NO MORE THAN 2". SHOULD ADDITIONAL SOIL BE REQUIRED, THE ENGINEER WILL DESIGNATE AN AREA TO OBTAIN ADDITIONAL SOIL. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-70) DELETED
- (C-71) WHERE EXISTING SIGNS NEED RE-ADJUSTMENT TO KEEP THE SIGN 1" ABOVE THE FUSE PLATE TO COMPLY WITH STD. FGS1-1 AND FGS2-1-(LATEST REVISION), THE CONTRACTOR SHALL CUT ANY WIDE FLANGE SIGN POSTS THAT EXTEND ABOVE THE SIGN. THE CUT SURFACE SHALL BE GROUND SMOOTH AND GIVEN A HEAVY AND THOROUGH COAT OF ZINC-RICH PAINT IN A MANNER APPROVED BY ENGINEER.
- (C-72) UPRIGHT LENGTHS OF OVERHEAD SIGN STRUCTURES SHOWN ARE APPROXIMATE AND ACTUAL LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR'S FIELD SURVEY.
- (C-73) DETAILS FOR MOUNTING SIGNS TO OVERHEAD STRUCTURES SHALL BE APPROVED BY THE ENGINEER AND SUBMITTED WITH SHOP DRAWINGS FOR OVERHEAD STRUCTURES. NO MOUNTING HOLES SHALL BE PERMITTED IN OVERHEAD STRUCTURES UPRIGHT MEMBERS.
- (C-74) DELETED
- (C-75) ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ON THE BRIDGE MOUNT OVERHEAD SIGN DETAIL SHEET ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO FABRICATE BRIDGE MOUNT SIGN STRUCTURE AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.
- (C-76) CONTRACTOR SHALL PROVIDE THE ENGINEER A MINIMUM OF SEVEN (7) DAYS ADVANCE NOTICE FOR INSTALLATION OF OVERHEAD SIGN STRUCTURES AND

OVERHEAD SIGNS. INSTALLATION SHOULD PREFERABLY BE ACCOMPLISHED ON SUNDAY BETWEEN 7:00 A.M. AND 10:00 A.M.

TRAFFIC SIGNALS PAY QUANTITY NOTES

- (TR-1) PAY ITEM INCLUDES _____ WHEELCHAIR RAMPS. CURB REMOVAL, SAWING PAVEMENT, AND ALL OTHER MISCELLANEOUS WORK NEEDED TO COMPLETE THE RAMP INSTALLATION SHALL BE INCLUDED IN THE BID PRICE.
- (TR-6) THE CONTROLLERS TO BE FURNISHED ON THIS PROJECT SHALL BE _____ PHASE VEHICLE ACTUATED SOLID STATE DIGITAL TRAFFIC SIGNAL CONTROLLERS. A MINIMUM OF _____ LOAD SWITCH RECEPTACLES SHALL BE FURNISHED AND WIRED TO THE MOUNTING FRAMES. ALL WIRING FROM THE FIELD TERMINALS SHALL BE WIRED TO THE MOUNTING FRAME FOR AN _____ PHASE OPERATION. NO CABINET OR CONTROLLER WIRING SHALL BE REQUIRED EXCEPT FOR ADDITIONAL DETECTOR CONNECTING CABLES WHEN CONTROLLER IS EXPANDED FOR AN _____ PHASE OPERATION. THE CONTROLLER SHALL BE CAPABLE OF PERFORMING AS SHOWN ON THE PHASE AND SEQUENCE DIAGRAM.
- PEDESTRIAN ISOLATION SHALL BE PROVIDED IN THE CONTROLLER CABINET. ALL N.E.M.A. FUNCTIONS SHALL TERMINATE IN THE CONTROLLER CABINET.
- (TR-7) TIME BASE COORDINATING SYSTEM TO BE FURNISHED ON THIS PROJECT SHALL PERMIT COORDINATION OF SIGNALIZED INTERSECTION WITHOUT THE USE OF INTERCONNECTING CABLE. EACH INTERSECTION SHALL BE PROVIDED WITH A COORDINATION UNIT THAT PROVIDES THE SYNCHRONIZING SIGNALS FROM INTERNALLY STORED COORDINATION PLAN INFORMATION. THE UNIT SHALL EMPLOY DESIGN TECHNIQUES CONSISTENT WITH THE LATEST TECHNOLOGY ACCOMPLISHED THROUGH THE USE OF MICROPROCESSOR AND SOLID STATE CIRCUITRY. THE UNITS SHALL BE CAPABLE OF STORING AND IMPLEMENTING 52 WEEKS OF COORDINATION PLANS, SYNCHRONIZING FROM: TIME-OF-DAY, DAY-OF-WEEK AND WEEK-OF-YEAR. UNITS SHALL BE FURNISHED WITH 16 CONTROLLED FUNCTIONS.
- (TR-8) THE CONTROLLER AND CONFLICT MONITOR SHALL MEET THE LATEST N.E.M.A. SPECIFICATION. THE CONTRACTOR SHALL FURNISH A PRETIMED SOLID STATE DIGITAL MICRO-PROCESSOR CONTROLLER WITH C.M.O.A. LOGIC CIRCUITRY. THE CONTROLLER TO BE FURNISHED SHALL BE DESIGNED TO FUNCTION AT AN ISOLATED INTERSECTION OR IN A COORDINATED SYSTEM OR AS A MASTER CONTROLLER. THE UNIT SHALL FEATURE FOUR DIAL FUNCTIONS WITH THREE OFFSETS, AND UP TO 24 INTERVALS PER DIAL.
- (TR-9) RAILROAD PRE-EMPTOR SHALL BE FURNISHED AS AN ADDITIONAL MODULE TO THE CONTROLLER THAT SHALL OPERATE AS SHOWN ON THE PHASE AND SEQUENCE DIAGRAM. THE PRE-EMPTOR SHALL BE FURNISHED WITH THE FOLLOWING REQUIREMENTS:

1. HOLD PHASE(S) ASSIGNMENT.
2. EXIT PHASE(S) ASSIGNMENT.
3. TRACK CLEARANCE GREEN TIME.
4. TRACK CLEARANCE AMBER TIME.
5. TRACK CLEARANCE RED TIME.
6. TRACK CLEARANCE PHASE(S) ASSIGN
7. DELAY TIME BEFORE PRE-EMPTION
8. FINAL CLEARANCE AMBER TIME.
9. FINAL CLEARANCE ALL-RED TIME.
10. FLASH SELECTED PHASE AMBER/
12. PED CLEARANCE THROUGH AMBER WHEN ENTERING PRE-EMPT.
13. MINIMUM/GUARANTEED GREEN TIME WHEN ENTERING PRE-EMPT.
14. MINIMUM/GUARANTEED AMBER TIME WHEN ENTERING PRE-EMPT.
15. MINIMUM/GUARANTEED ALL RED TIME WHEN ENTERING PRE-EMPT.
16. MINIMUM/GUARANTEED PED CLEARANCE WHEN ENTERING PRE-EMPT

RED DURING HOLD INTERVAL.
11. AN INDICATOR TO INDICATE WHEN
A CONTROLLER IS IN PRE-EMPT.

17. WHEN TRACK CLEARANCE PHASE
IS TIMING IN ALL-RED, THE INDICATION
WILL GO IMMEDIATELY TO GREEN
UPON ENTERING PRE-EMPT.

THE PREEMPTION FEATURE SHALL HAVE AN ELECTRICAL CIRCUIT OF THE CLOSED-CIRCUIT PRINCIPLE, OR A SUPERVISED COMMUNICATION CIRCUIT BETWEEN THE CONTROL CIRCUITS OF THE HIGHWAY-RAIL GRADE CROSSING WARNING SYSTEM AND THE TRAFFIC CONTROL SIGNAL CONTROLLER. THE TRAFFIC CONTROL SIGNAL CONTROLLER PREEMPTOR SHALL BE ACTIVATED VIA THE SUPERVISED COMMUNICATION CIRCUIT OR THE ELECTRICAL CIRCUIT THAT IS NORMALLY ENERGIZED BY THE CONTROL CIRCUITS OF THE HIGHWAY-RAIL GRADE CROSSING WARNING SYSTEM. THE APPROACH OF A TRAIN TO A HIGHWAY-RAIL GRADE CROSSING SHALL DE-ENERGIZE THE ELECTRICAL CIRCUIT OR ACTIVATE THE SUPERVISED COMMUNICATION CIRCUIT, WHICH IN TURN SHALL ACTIVATE THE TRAFFIC CONTROL SIGNAL CONTROLLER PREEMPTOR. THIS SHALL ESTABLISH AND MAINTAIN PREEMPTION CONDITION DURING THE TIME THE HIGHWAY-RAIL GRADE CROSSING WARNING SYSTEM IS ACTIVATED, EXCEPT THAT WHEN CROSSING GATES EXISTS, THE PREEMPTION CONDITION SHALL BE MAINTAINED UNTIL THE CROSSING GATES ARE ENERGIZED TO START THEIR UPWARD MOVEMENT. WHEN MULTIPLE OR SUCCESSIVE PREEMPTIONS OCCUR, TRAIN ACTIVATION SHALL RECEIVE FIRST PRIORITY (MUTCD, CURRENT EDITION).

(TR-10) THE CONTROLLERS TO BE FURNISHED ON THIS PROJECT SHALL BE _____ PHASE VEHICLE ACTUATED SOLID STATE DIGITAL TRAFFIC SIGNAL CONTROLLERS. A MINIMUM OF _____ LOAD SWITCH RECEPTACLES SHALL BE FURNISHED AND WIRED TO THE MOUNTING FRAMES. THE CONTROLLER SHALL BE CAPABLE OF PERFORMING AS SHOWN ON THE PHASE AND SEQUENCE DIAGRAM.

PEDESTRIAN ISOLATION SHALL BE PROVIDED IN THE CONTROLLER CABINET. ALL N.E.M.A. FUNCTIONS SHALL TERMINATE IN THE CONTROLLER CABINET.

(TR-11) THE CONTROLLERS TO BE FURNISHED ON THIS PROJECT SHALL BE _____ PHASE SEMI-VEHICLE ACTUATED SOLID STATE DIGITAL TRAFFIC SIGNAL CONTROLLERS _____ PEDESTRIAN TIMING. A MINIMUM OF _____ LOAD SWITCH RECEPTACLES SHALL BE FURNISHED AND WIRED TO THE MOUNTING FRAME FOR AN _____ PHASE OPERATION. NO CABINET OR CONTROLLER WIRING SHALL BE REQUIRED EXCEPT FOR ADDITIONAL DETECTOR CONNECTING CABLES WHEN CONTROLLER IS EXPANDED FOR AN _____ PHASE OPERATION. THE CONTROLLER SHALL BE CAPABLE OF PERFORMING AS SHOWN ON THE PHASE AND SEQUENCE DIAGRAM.

PEDESTRIAN ISOLATION SHALL BE PROVIDED IN THE CONTROLLER CABINET. ALL N.E.M.A. FUNCTIONS SHALL TERMINATE IN THE CONTROLLER CABINET.

(TR-23) DELETED

(TR-24) ALL TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CITY. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DIRECTED BY THE ENGINEER. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS TO BECOME THE PROPERTY OF THE CONTRACTOR.

(TR-27) ALL SIGNS REMOVED SHALL BECOME THE PROPERTY OF THE CITY. THE CONTRACTOR SHALL NEATLY STACK SUCH REMOVED MATERIAL AT A LOCATION ON THE JOB SITE AS DIRECTED BY THE ENGINEER. THE PRICE BID SHALL INCLUDE THE REMOVAL OF ALL FOOTINGS BELOW GROUND LEVEL OR AS DIRECTED BY THE ENGINEER. FOOTINGS TO

BECOME THE PROPERTY OF THE CONTRACTOR.

TRAFFIC LIGHTING PAY QUANTITY NOTES

- (TL-9) QUANTITIES INCLUDE STRUCTURAL CONCRETE TO BE USED FOR THE FOLLOWING:
GROUND MOUNTED FOOTINGS..... = _____ C.Y.

BARRIER MOUNTED FOOTINGS..... = _____ C.Y.

BLOCKOUTS FOR FOOTINGS..... = _____ C.Y.
=====
- (TL-10) QUANTITIES INCLUDE REINFORCING STEEL TO BE USED FOR THE FOLLOWING:
GROUND MOUNTED FOOTINGS..... = _____ LBS.

BARRIER MOUNTED FOOTINGS..... = _____ LBS.

BLOCKOUTS FOR FOOTINGS.....= _____ LBS.
=====
- (TL-12) TWO HANDHOLES WILL BE REQUIRED ON EACH OF THESE POLES. SEE TYPICAL PIER MOUNTED LIGHT POLE DETAIL, SHT. NO. _____, AND LIGHT POLE SCH.
- (TL-13) INCLUDES _____ SPECIAL LENGTH POLES TO BE INSTALLED ON BRIDGE PIER BRACKETS OR FOOTINGS. SEE LIGHT POLE SCH., SHT. NO. _____.
- (TL-14) INCLUDES _____ SPECIAL LENGTH POLES TO BE INSTALLED BEHIND OR ON TOP OF RETAINING WALLS. SEE LIGHT POLE SCH., SHT. NO. _____.
- (TL-15) _____ - _____' MTG. HT. POLES WITH _____' & _____' HLMA (G.STL.) ARE NOT MOUNTED ON BREAKAWAY BASES. A HANDHOLE WILL BE REQUIRED ON THESE POLES. SEE STD.'S HLP1-1, HLP2-1, AND HLP3-1-(LATEST REVISIONS) AND LIGHT POLE SCH'S.
- (TL-16) _____ - _____' MTG. HT. POLES WITH _____' & _____' HLMA (G.STL.) ARE TO BE MOUNTED ON BREAKAWAY BASES. SEE STD.'S HLP1-1, HLP2-1, AND HLP3-1-(LATEST REVISIONS) AND LIGHT POLE SCH'S.
- (TL-22) _____ - ROADWAY LUMINAIRES SHALL BE 150 WATT HIGH PRESSURE SODIUM, WITH CLEAR LAMP OF 16,000 LUMENS, ILLUMINATION ENGINEERING SOCIETY DISTRIBUTION AS FOLLOWS:
VERTICAL = _____; LATERAL = TYPE ____; CONTROL = _____;
O.D.O.T. FIXTURE STYLE = A1. SEE STD. HLD1-1-(LATEST REVISION).
- (TL-23) _____ - ROADWAY LUMINAIRES SHALL BE 200 WATT HIGH PRESSURE SODIUM, WITH CLEAR LAMP OF 22,000 LUMENS, ILLUMINATION ENGINEERING SOCIETY DISTRIBUTION AS FOLLOWS:
VERTICAL = _____; LATERAL = TYPE ____; CONTROL = _____;
O.D.O.T. FIXTURE STYLE = A1. SEE STD. HLD1-1-(LATEST REVISION).
- (TL-24) _____ - ROADWAY LUMINAIRES SHALL BE 250 WATT HIGH PRESSURE SODIUM, WITH CLEAR LAMP OF 28,000 LUMENS, ILLUMINATION ENGINEERING SOCIETY DISTRIBUTION AS FOLLOWS:
VERTICAL = _____; LATERAL = TYPE ____; CONTROL = _____;
O.D.O.T. FIXTURE STYLE = A1. SEE STD. HLD1-1-(LATEST REVISION).
- (TL-25) _____ - ROADWAY LUMINAIRES SHALL BE 310 WATT HIGH PRESSURE SODIUM, WITH CLEAR LAMP OF 37,000 LUMENS, ILLUMINATION ENGINEERING SOCIETY DISTRIBUTION AS FOLLOWS:
VERTICAL = _____; LATERAL = TYPE ____; CONTROL = _____;

O.D.O.T. FIXTURE STYLE = A1. SEE STD. HLD1-1-(LATEST REVISION).

(TL-26) ____ - ROADWAY LUMINAIRES SHALL BE 400 WATT HIGH PRESSURE SODIUM, WITH CLEAR LAMP OF 61,000 LUMENS, ILLUMINATION ENGINEERING SOCIETY DISTRIBUTION AS FOLLOWS:

VERTICAL = ____; LATERAL = TYPE ____; CONTROL = ____;
O.D.O.T. FIXTURE STYLE = A1. SEE STD. HLD1-1-(LATEST REVISION)

(TL-27) DELETED

(TL-31) INCLUDES THE FOLLOWING ITEMS:

____ - HIGH MAST ASYMMETRIC DISTRIBUTION LUMINAIRES (LONG AND NARROW) FIXTURES SHALL BE HIGH PRESSURE SODIUM, CLEAR LAMP, 140,000 LUMENS, IES TYPE S-2-C, STYLE E1, SIMILAR TO A HOLOPHANE MODEL NO. HMST-C10HP-48-L-1, OR APPROVED EQUAL.

(TL-32) INCLUDES THE FOLLOWING ITEMS:

____ - HIGH MAST ASYMMETRIC DISTRIBUTION LUMINAIRES. FIXTURES SHALL BE HIGH PRESSURE SODIUM, CLEAR LAMP, 140,000 LUMENS, IES TYPE S-2-N, STYLE E1, SIMILAR TO A HOLOPHANE MODEL NO. HMST-C10HP-48-A-1, OR APPROVED EQUAL.

(TL-33) INCLUDES THE FOLLOWING ITEMS:

____ - HIGH MAST SYMMETRIC DISTRIBUTION LUMINAIRES. FIXTURES SHALL BE HIGH PRESSURE SODIUM, CLEAR LAMP, 140,000 LUMENS, IES TYPE 5-N, STYLE E1, SIMILAR TO A HOLOPHANE MODEL NO. HMST-C10HP-48-S-1, OR APPROVED EQUAL. MAXIMUM CANDLEPOWER SHALL BE AT 60 TO 65 DEGREES FROM NADIR.

(TL-34) INCLUDES ____ - ____ FT. TOTAL LENGTH WOOD SERVICE POLE(S), CLASS ____.

(TL-35) SEE SERVICE POLE SCHEDULE; FOR ADDITIONAL INFORMATION CONCERNING THE SERVICE POLE, CONTACT THE FOLLOWING PRIOR TO INSTALLATION:

PERSON'S NAME _____
WITH THE COMPANY/CITY OF . . . _____
COMPANY'S/CITY'S TELEPHONE NO. _____.

(TL-40) _____ PORTABLE POWER UNITS WILL BE REQUIRED FOR THIS PROJECT AND SHALL BECOME THE PROPERTY OF _____ AFTER THE PROJECT IS COMPLETE. SEE STD. HMLD1-1-(LATEST REVISION).

(TL-43) ALL REMOVED SERVICE POLES, LIGHT POLES, MAST ARMS, LUMINAIRES, BREAKAWAY BASES AND PERTINENT EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF _____. THE CONTRACTOR SHALL NEATLY STACK THE REMOVED ITEMS IN AN AREA DESIGNATED BY THE ENGINEER WITHIN THE PROJECT LIMITS. THE ITEMS THAT ARE TO BE REMOVED SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING THESE OPERATIONS.

(TL-44) INCLUDED IN THE COST OF THIS ITEM, THE CONTRACTOR SHALL EITHER COMPLETELY REMOVE THE EXISTING CONCRETE LIGHT POLE FOOTING(S) OR CUT OFF THE TOP PORTION OF THE FOOTING(S) TO A MINIMUM OF ONE FOOT BELOW GRADE. THE RESULTING HOLE(S) SHALL BE BACKFILLED, COMPACTED AND ALL DEBRIS DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

TRAFFIC LIGHTING GENERAL CONSTRUCTION NOTES

(C-150) SYMBOLS AND LEGENDS ARE DIAGRAMMATIC ONLY AND LOCATIONS SHALL BE ADJUSTED FOR EXISTING FIELD CONDITIONS, BUT NO MAJOR ALTERATIONS OR RELOCATIONS WILL BE MADE WITHOUT FIRST CONSULTING WITH THE TRAFFIC ENGINEER DIVISION AT (405) 521-2861.

(C-151) THIS PROJECT SHALL BE CONSTRUCTED WITHOUT CLOSING THE EXISTING ROAD TO

LOCAL AND THROUGH TRAFFIC. SEE O.D.O.T STANDARDS AND DETAIL DRAWINGS FOR MAINTENANCE OF LOCAL AND THROUGH TRAFFIC.

- (C-152) ALL BROKEN CONCRETE, WASTE MATERIAL, AND DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN AN AREA APPROVED BY THE ENGINEER. NO PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.
- (C-155) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC.... PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES:
THE "OKIE" NOTIFICATION CENTER 811 OR 1-800-522-6543 OR WWW.CALLOKIE .COM OR THE LOCAL COUNTY CLERK'S OFFICE.

DEPTH OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

- (C-156) ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO MAKE THE ELECTRICAL CONNECTIONS TO THE EXISTING OVERHEAD SIGN STRUCTURES AND LIGHTS WILL BE PAID FOR AT THE UNIT PRICE BID FOR THE REQUIRED MATERIALS USED TO MAKE THE COMPLETED CONNECTIONS.
- (C-158) THE CONTRACTOR SHALL CONTACT THE BRIDGE DIVISION OF THE OKLAHOMA DEPARTMENT OF TRANSPORTATION FOR QUESTIONS CONCERNING COMPLIANCE AND INTERPRETATIONS TO THE A.A.S.H.T.O. "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS".

- (C-159) THE LIGHT POLE NUMBER PLATES WILL BE FURNISHED TO THE CONTRACTOR BY O.G.&E.. THE POLES IN THE MEDIAN SHALL HAVE THE NUMBERS INSTALLED ON THE EAST SIDE OF THE LIGHT POLE. ALL OTHER POLES WILL BE READABLE FROM THE STREET SIDE OF THE POLE. THE CONTRACTOR SHALL INSTALL THESE NUMBER PLATES AS PER O.G.&E.'S RECOMMENDATIONS AFTER THE POLES ARE ERECTED.

PRIOR TO OG&E PROVIDING THE LIGHT POLE NUMBER PLATES THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH TWO SETS OF FINAL "AS BUILT" PLANS. ALL COST FOR INSTALLING THE NUMBERS AND PROVIDING THE PLANS SHALL BE INCLUDED IN OTHER ITEMS OF WORK. THE ENGINEER WILL MAIL ONE SET OF THE "AS BUILT" PLANS TO:

OG&E STREET LIGHT DEPARTMENT
321 N. HARVEY
OKLAHOMA CITY, OK. 73129

- (C-160) THE CONTRACTOR SHALL COOPERATE WITH THE ENGINEER, THE CITY AND THE LOCAL UTILITY CO. TO KEEP THE EXISTING LIGHTING SYSTEM IN SERVICE AS MUCH AS POSSIBLE WHILE DOING THE WORK SPECIFIED BY THIS CONTRACT. IF TEMPORARY CONNECTIONS ARE FEASIBLE AND JUSTIFIABLE, THE ENGINEER MAY REQUIRE THAT THE CONTRACTOR PROVIDE THESE TEMPORARY POWER CONNECTIONS. TEMPORARY CONNECTIONS WILL BE PAID FOR AT THE UNIT BID FOR THE MATERIALS USED.
- (C-161) THE ITEMS THAT ARE TO BE REMOVED AND/OR RESET SHALL BE HANDLED WITH CARE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OCCURRING DURING

THESE OPERATIONS.

- (C-162) THE ANCHOR BOLTS SIZE AND CONFIGURATION SHALL BE VERIFIED BY THE CONTRACTOR SO THAT THE NEW LIGHT POLES BASE PLATES WILL BE BUILT TO FIT ANY EXISTING POLE FOOTING. IN THE EVENT ANY EXISTING POLE FOOTING REQUIRES MODIFICATION TO ACCOMMODATE THE NEW LIGHT POLE OR IF ANY LIGHT POLE BASE PLATE REQUIRES MODIFICATION, THE CONTRACTOR SHALL SUBMIT DRAWINGS OF THE MODIFICATIONS TO THE BRIDGE DIVISION FOR APPROVAL BEFORE PERFORMING THE MODIFICATIONS. ALL COST FOR THE MODIFICATIONS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
- (C-163) THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A BOLT CIRCLE TEMPLATE(S). THE TEMPLATE(S) SHALL BE 1/4" THICK STEEL PLATE(S), AND BE PERMANENTLY LABELED WITH THE CONTRACTOR'S COMPANY NAME, BOLT CIRCLE DIAMETER AND THE ANCHOR BOLT DIAMETER. THE COST OF THE TEMPLATE(S) SHALL BE PAID FOR IN OTHER ITEMS OF WORK.
- (C-164) THE PROJECT ENGINEER SHALL BE RESPONSIBLE FOR COORDINATING THE EXISTING PROJECT(S) WITH PROJECT _____, SO THAT CONSTRUCTION WORK CAN BE MAINTAINED ON ALL PERTAINING PROJECTS.
- (C-165) PRIOR TO CONSTRUCTION OF FOOTINGS THE CONTRACTOR SHALL VISUALLY INSPECT THE PLAN LOCATION OF ALL HIGH MAST TOWERS AND CONVENTIONAL LIGHT POLES FOR PROPER OVERHEAD WIRE CLEARANCE. THESE CLEARANCES SHALL BE IN ACCORDANCE TO THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SECTION 1910. THERE SHALL BE A MINIMUM RADII OF 10 FOOT CLEARANCE OF ANY OVERHEAD LINES FROM THE CLOSEST POINT ON THE LIGHT POLE. ANY NEW FOOTINGS PUT IN CLOSER THAN THIS 10 FOOT MINIMUM SHALL BE RELOCATED AT THE EXPENSE OF THE CONTRACTOR, INCLUDING REMOVAL OF THE FOOTING AND ALL MATERIALS TO CONSTRUCT THE NEW FOOTING.

TRAFFIC SAFETY PAY QUANTITY NOTES

- (TP-1) PAYMENT FOR THIS ITEM WILL BE BASED ON PLAN QUANTITY. SEE THE 2009 SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- (TP-2) INCLUDES SLOPE ADJUSTMENT AT APPROACH TO GUARDRAIL. 10:1 RECOMMENDED.
- (TP-3) THIS IS AN ESTIMATED QUANTITY. EXCAVATION WILL BE REQUIRED AT GUARDRAIL INSTALLATION LOCATIONS AND AT PIPE AND BOX CULVERT LOCATIONS. THIS WORK SHALL BE COMPLETED IN A MANNER APPROVED BY THE ENGINEER.
- (TP-4) THIS IS AN ESTIMATED QUANTITY ONLY. THIS ITEM SHALL INCLUDE ALL NECESSARY WORK FOR CONSTRUCTION OF SHOULDERS UNDER NEW GUARDRAIL INSTALLATIONS.
- (TP-7) THIS IS AN ESTIMATED QUANTITY. BORROW WILL BE REQUIRED AT GUARDRAIL INSTALLATION LOCATIONS AND AT PIPE AND BOX CULVERT LOCATIONS. THIS WORK SHALL BE COMPLETED IN A MANNER APPROVED BY THE ENGINEER. ALSO INCLUDED IN THIS ITEM WILL BE BACK SLOPE AND DITCH MODIFICATIONS.
- (TP-8) SALVAGE APPROXIMATELY 5' WIDE X 4" DEEP IN AREAS WHERE ASPHALT WIDENING FOR GUARDRAIL AND MEDIAN BARRIER INSTALLATION OCCUR, AND WHERE DITCH LINER RELOCATION IS TO BE PERFORMED.
- (TP-11) MULCH SODDING TO BE USED IN AREAS ADJACENT TO GUARDRAIL AND MEDIAN BARRIER INSTALLATION, HEADWALL MODIFICATION AND DITCH RELOCATION. THE WORK SHALL BE DONE IN A MANNER APPROVED BY THE ENGINEER.
- (TP-12) ESTIMATED QUANTITY ONLY, TO CONSTRUCT A VARIABLE WIDTH BY 4" THICK PAVED SURFACE UNDER NEW GUARDRAIL INSTALLATIONS AS DIRECTED BY THE ENGINEER, SEE STD. GHW1-1(LATEST REVISION).

- (TP-13) INCLUDES ENOUGH MATERIAL TO FILL THE AREA BETWEEN THE ROADWAY AND HEADWALL/CURB AT THE FOLLOWING BRIDGE LOCATIONS: _____.
- (TP-16) EXISTING VERTICAL REINFORCING STEEL LEFT AFTER REMOVAL OF EXISTING BRIDGE PARAPET SHALL BE CLEANED OF ALL LOOSE CONCRETE AND FOREIGN MATERIAL, STRAIGHTENED AND LEFT IN PLACE FOR BOND TO NEW CONCRETE. PRICE BID TO INCLUDE THIS ITEM OF WORK.
- (TP-20) PRICE BID FOR THIS ITEM SHALL INCLUDE THE FILLING AND TAMPING OF HOLES LEFT AFTER THE REMOVAL OF THE POSTS DURING THE GUARDRAIL REMOVAL OPERATION. THIS WORK SHALL BE PERFORMED IN AN MANNER APPROVED BY THE ENGINEER.
- (TP-23) DELETED
- (TP-24) DELETED
- (TP-25) NO RAW GUARDRAIL ENDS SHALL BE LEFT EXPOSED TO TRAFFIC DURING NON-WORKING HOURS.
- (TP-26) INCLUDES VARIOUS SHOP CURVED SECTIONS OF GUARDRAIL AT THE FOLLOWING BRIDGE LOCATIONS: _____. THE ACTUAL RADIUS TO BE USED SHALL BE DETERMINED BY THE CONTRACTOR.
- (TP-27) PRICE BID FOR THIS ITEM SHALL INCLUDE THE DRILLING OF ADDITIONAL HOLES IN EXISTING PARAPET AS MAY BE REQUIRED FOR THE PROPER INSTALLATION OF A TYPE "D" ANCHOR UNIT.
- (TP-28) PRICE BID FOR THIS ITEM INCLUDES THE NOTCHING OF EXISTING CURBS AS SHOWN ON DETAIL SHEET NO. _____, FOR PROPER PLACEMENT OF THE TYPE "D" ANCHOR UNITS AT BRIDGE LOCATIONS NO. _____.
- (TP-29) PRICE BID FOR THIS ITEM INCLUDES FOUR (4) SPECIAL MOUNTING PLATES AS SHOWN ON DETAIL SHEET NO. _____, FOR PROPER PLACEMENT OF THE TYPE "E" ANCHOR UNITS AT BRIDGE LOCATIONS NO. _____.
- (TP-31) INCLUDES THE COST OF CONSTRUCTING DRAINAGE OPENINGS IN MEDIAN BARRIER WALL AS NEEDED AND AS DIRECTED BY THE ENGINEER. SEE STD. MB-3-(LATEST REVISION).
- (TP-38) SEE BRIDGE PARAPET DETAIL SHEET NO. _____.
- (TP-40) BRIDGE RAILING AND POSTS SHALL BE REMOVED FLUSH WITH CURB AND SURFACE REFINISHED WITH DURACAL OR EQUIVALENT.
- (TP-43) PRICE BID FOR THIS ITEM INCLUDES THE REMOVAL OF APPROXIMATELY _____ L.F. OF METAL LATTICE ON THE TRUSS BRIDGE AT LOCATION NO. _____.

-NEW CABLE BARRIER SYSTEM PROJECT-

- (TP-44) INCLUDED IN THIS PAY ITEM WILL BE TWO (2) DAYS OF TRAINING FROM THE MANUFACTURER'S REPRESENTATIVE FOR MAINTAINING WIRE ROPE SAFETY FENCE SYSTEM. THE TRAINING SESSION(S) SHALL INCLUDE TRAINING TO PERTINENT ODOT AND LOCAL EMERGENCY PERSONNEL. PARTICIPANT SELECTION AND TRAINING LOCATION SHALL BE APPROVED BY THE ENGINEER. *[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4), End Anchors]*
- (TP-45) INCLUDED IN THIS PAY ITEM IS ALL MISCELLANEOUS HARDWARE REQUIRED BY THE MANUFACTURER TO BE USED FOR INSTALLATION OF SOCKETED CABLE BARRIER

SYSTEM. ALSO, AN ADDITIONAL (Quantity) POSTS AND POST ACCESSORIES (CAPS, PLASTIC HARDWARE, GROUND COVER, ETC.) SHALL BE DELIVERED TO THE ODOT (Facility) IN (City). **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4), End Anchors]**

- (TP-46) CABLE WILL BE MEASURED FROM BEGINNING OF WIRE ROPE CABLE TO END OF WIRE ROPE CABLE. **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4)]**
- (TP-47) ALL POSTS SHALL HAVE CAPS WHICH SHALL BE AFFIXED TO THE POST WITH A DURABLE LIQUID ADHESIVE, SUCH AS LIQUID NAILS. EVERY FIFTH POST SHALL BE DELINEATED IN EACH DIRECTION WITH RETROFLECTIVE SHEETING MEETING SPECIFICATION ASTM D-4956 TYPE VII, VIII, OR IX (MIN. 7 SQ. IN. YELLOW). **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4)]**
- (TP-48) IF THE SYSTEM POSTS FALL ON THE TOP OF A CROSS DRAIN BOX OR OTHER CONFLICTING UNDERGROUND STRUCTURE, SPECIAL POST DESIGN WILL BE REQUIRED. CABLE MANUFACTURER SHALL PROVIDE THE POST DESIGN TO THE ENGINEER FOR APPROVAL. ALL INSTALLATIONS MUST BE IN ACCORDANCE TO THE MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATION. **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4)]**
- (TP-49) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE LETTER OF APPROVAL FROM THE F.H.W.A. INDICATING THE INSTALLED CABLE BARRIER SYSTEM MEETS ALL TEST CRITERIA OF NCHRP-350 TEST LEVEL 4 (TL-4), AND SUBMIT IT TO THE RESIDENT ENGINEER AND THE CHIEF TRAFFIC ENGINEER. **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4)]**
- (TP-50) TURNBUCKLES SHALL BE NO CLOSER THAN 1' TO A CABLE POST, IF IT INTERFERES WITH THE TENSIONING OPERATION OF THE SYSTEM. THE HEIGHTS FOR ALL ROWS OF CABLES SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS. THE BOTTOM CABLE MUST BE WITHIN THE TOLERANCE LIMITS RECOMMENDED BY THE MANUFACTURER. **[NOTE FOR CONSULTANT OR DESIGNER: High-Tension Cable Barrier (TL-4)]**
- (TP-51) THE TENSION METER SHALL BE OF THE TYPE RECOMMENDED BY THE MANUFACTURER OF THE CABLE BARRIER SYSTEM PROVIDED, AND SHALL BE APPROVED BY THE ODOT TRAFFIC ENGINEERING DIVISION. IT SHALL ALSO BE NEW, CALIBRATED, FUNCTIONAL, AND CAPABLE OF READING THE TENSION ON THE CABLE BARRIER SYSTEM TO WITHIN THE MANUFACTURER'S RECOMMENDED TOLERANCES. THE DEVICE SHALL ALSO BE DEMONSTRATED BY THE INSTRUCTOR(S) ON HOW TO OPERATE THEM AND PROVIDE OTHER HELPFUL INFORMATION TO THE PARTICIPANTS. IT SHALL BE DELIVERED TO THE ODOT (Facility) IN (City). **(NOTE FOR CONSULTANT OR DESIGNER: Cable Barrier Tension Meter)**
- (TP-52) PRICE BID FOR THIS ITEM INCLUDES A SOIL REPORT TO BE PROVIDED BY THE CONTRACTOR TO THE CABLE MANUFACTURER INDICATING ALL NECESSARY SOIL INFORMATION REQUIRED FOR THE MANUFACTURER TO DESIGN POST FOOTINGS AND ANCHOR UNITS FOR THIS PROJECT. THE SOIL REPORT AND FOUNDATION FOOTING DESIGN SHALL BE COMPLETED AND APPROVED BY THE ENGINEER, PRIOR TO EXCAVATION OF END ANCHOR AND POST FOOTINGS. ALL POSTS AND ANCHOR UNIT FOUNDATION DESIGNS RECOMMENDED BY THE MANUFACTURER FOR THIS PROJECT SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER. THE POST FOOTINGS SHALL NOT BE LESS THAN 12" DIAMETER BY 36" DEEP. FOOTINGS SHALL NOT EXTEND ABOVE GROUND MORE THAN 1". **(NOTE FOR CONSULTANT OR DESIGNER: Class AA Concrete)**
- (TP-53) THIS IS AN ESTIMATED QUANTITY TO BE USED FOR POST FOOTINGS AND ANCHOR UNITS FOR THIS PROJECT. THIS ITEM SHALL ALSO INCLUDE REINFORCING STEEL BARS REQUIRED FOR POST FOOTINGS AND ANCHOR UNITS AS SHOWN BY THE MANUFACTURER'S DESIGN. **(NOTE FOR CONSULTANT OR DESIGNER: Class AA Concrete)**

- (TP-54) PRICE BID FOR THIS ITEM SHALL INCLUDE THE COST OF ANY PIPE ADJUSTMENT IF NEEDED, AS WELL AS THE CONCRETE AND STEEL NEEDED FOR THE NEW STRUCTURES, SEE SHEET (Median Drain Detail Sheet Number). *(NOTE FOR CONSULTANT OR DESIGNER: Inlet Adjust to Grade)*
- (TP-55) SEE SHEET (Cable Barrier Summary Sheet Number) FOR SIZE AND LOCATION OF DRAINAGE INLETS. *(NOTE FOR CONSULTANT OR DESIGNER: Inlet Adjust to Grade)*
- (TP-56) ALL OPEN HOLES MUST BE COVERED WITH STEEL PLATES FOR PERIODS OF NO WORK. *(NOTE FOR CONSULTANT OR DESIGNER: Inlet Adjust to Grade)*

-INSTALLATION OF CABLE BARRIER SYSTEM PROJECT-

- (TP-57) PRICE BID FOR THIS ITEM CONSISTS OF INSTALLATION OF CABLE BARRIER SYSTEM AND ITS HARDWARE (CAPS, POST, TURN BUCKLE, ETC.). CONTRACTOR SHALL USE THE MATERIAL REMOVED FROM THE EXISTING CABLE BARRIER SYSTEM WITH THE EXCEPTION OF CONCRETE FOOTINGS. COST TO INCLUDE ANY ADDITIONAL HARDWARE NEEDED TO COMPLETE THE INSTALLATION. CONTRACTOR SHALL SWAGE NEW FITTINGS FOR THE INSTALLATION OF NEW SECTION IF DEEMED NECESSARY BY THE ENGINEER. PRICE BID FOR THIS ITEM ALSO INCLUDES COST OF NEW SWAGING FOR CABLE BARRIER SYSTEM. *(NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System)*
- (TP-58) COST TO INCLUDE ANY ADDITIONAL HARDWARE NEEDED TO COMPLETE THE INSTALLATION. CONTRACTOR SHALL SWAGE NEW FITTINGS FOR THE INSTALLATION OF EXISTING SECTION IF NECESSARY BY THE ENGINEER. PRICE BID FOR THIS ITEM ALSO INCLUDES COST OF NEW SWAGING FOR CABLE BARRIER SYSTEM. *(NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System)*
- (TP-59) TURNBUCKLES SHALL BE NO CLOSER THAN 1' TO A CABLE POST, IF IT INTERFERES WITH THE TENSIONING OPERATION OF THE SYSTEM. THE HEIGHTS FOR ALL ROWS OF CABLES SHALL CONFORM TO THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS. THE BOTTOM CABLE MUST BE WITHIN THE TOLERANCE LIMITS RECOMMENDED BY THE MANUFACTURER. *[NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System; if applicable, High-Tension Cable Barrier (TL-4)]*
- (TP-60) PRICE BID FOR THIS ITEM INCLUDES THE REMOVAL OR RELOCATION / RESET OF ANY EXISTING SIGNS OR DELINEATORS WITHIN THE MEDIAN WITH THE APPROVAL OF THE ENGINEER, AS WELL AS, RESHAPING THE DITCHES AS DIRECTED BY THE ENGINEER WITHIN THIS AREA PRIOR TO INSTALLATION OF THE CABLE BARRIER SYSTEM. RELOCATION OF ANY EXISTING SIGN OR DELINEATOR SHALL BE DETERMINED BY THE ENGINEER. *[NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System; if applicable, High-Tension Cable Barrier (TL-4)]*
- (TP-61) INCLUDED IN THIS PAY ITEM IS ALL MISCELLANEOUS HARDWARE REQUIRED BY THE MANUFACTURER TO BE USED FOR INSTALLATION OF SOCKETED CABLE BARRIER SYSTEM. ALSO, AN ADDITIONAL (Quantity) POSTS AND POST ACCESSORIES (CAPS, PLASTIC HARDWARE, GROUND COVER, ETC.) SHALL BE DELIVERED TO THE ODOT (Facility) IN (City). *[NOTE FOR CONSULTANT OR DESIGNER: if applicable, High-Tension Cable Barrier (TL-4) or End Anchors]*
- (TP-62) INCLUDED IN THIS PAY ITEM WILL BE TWO (2) DAYS OF TRAINING FROM THE MANUFACTURER'S REPRESENTATIVE FOR MAINTAINING WIRE ROPE SAFETY FENCE SYSTEM. THE TRAINING SESSION(S) SHALL INCLUDE TRAINING TO PERTINENT ODOT AND LOCAL EMERGENCY PERSONNEL. PARTICIPANT SELECTION AND TRAINING LOCATION SHALL BE APPROVED BY THE ENGINEER. *[NOTE FOR CONSULTANT OR DESIGNER: if applicable, High-Tension Cable Barrier (TL-4) or End Anchors]*

- (TP-63) CABLE WILL BE MEASURED FROM BEGINNING OF WIRE ROPE CABLE TO END OF WIRE ROPE CABLE. **[NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System; if applicable, Removal of Cable Barrier or High-Tension Cable Barrier (TL-4)]**
- (TP-64) ALL POSTS SHALL HAVE CAPS WHICH SHALL BE AFFIXED TO THE POST WITH A DURABLE LIQUID ADHESIVE, SUCH AS LIQUID NAILS. EVERY FIFTH POST SHALL BE DELINEATED IN EACH DIRECTION WITH RETROFLECTIVE SHEETING MEETING SPECIFICATION ASTM D-4956 TYPE VII, VIII, OR IX (MIN. 7 SQ. IN. YELLOW). **[NOTE FOR CONSULTANT OR DESIGNER: if applicable, High-Tension Cable Barrier (TL-4)]**
- (TP-65) IF THE SYSTEM POSTS FALL ON THE TOP OF A CROSS DRAIN BOX OR OTHER CONFLICTING UNDERGROUND STRUCTURE, SPECIAL POST DESIGN WILL BE REQUIRED. CABLE MANUFACTURER SHALL PROVIDE THE POST DESIGN TO THE ENGINEER FOR APPROVAL. ALL INSTALLATIONS MUST BE IN ACCORDANCE TO THE MANUFACTURER'S SPECIFICATIONS AND/OR RECOMMENDATION. **[NOTE FOR CONSULTANT OR DESIGNER: if applicable, High-Tension Cable Barrier (TL-4)]**
- (TP-66) INCLUDED IN THIS PAY ITEM IS ALL MISCELLANEOUS HARDWARE REQUIRED BY THE MANUFACTURER TO BE USED FOR INSTALLATION OF SOCKETED CABLE BARRIER SYSTEM. ALSO INCLUDED SHALL BE CABLE BARRIER POSTS, CAPS, PLASTIC HARDWARE, GROUND COVER, ETC. **[NOTE FOR CONSULTANT OR DESIGNER: if applicable, High-Tension Cable Barrier (TL-4) or End Anchors]**
- (TP-67) THE EXISTING CABLE BARRIER SYSTEM IS (Name of Existing Cable Barrier System). CONTRACTOR SHALL CONTACT THE ENGINEER FOR EXISTING END ANCHOR AND FOOTINGS DESIGN AND CONSTRUCT THE CABLE BARRIER SYSTEM ACCORDING TO THE MANUFACTURER RECOMMENDED INSTALLATION. ALL INSTALLATION OF CABLE BARRIERS ON THIS SECTION SHALL BE (Name of Existing Cable Barrier System). **[NOTE FOR CONSULTANT OR DESIGNER: Installation of Cable Barrier System; if applicable, High-Tension Cable Barrier (TL-4) or End Anchors]**
- (TP-68) PRICE BID FOR THIS ITEM CONSISTS OF REMOVAL OF EXISTING CABLE BARRIER SYSTEM, ITS CONCRETE FOOTINGS, AND/OR ANCHOR UNITS. CONTRACTOR SHALL REMOVE, SPOOL, COLLECT, AND STORE ALL CABLE BARRIER HARDWARE. THE MATERIALS SHALL BE STORED AT A LOCATION DETERMINED BY THE ENGINEER TO BE USED ON THIS PROJECT. ALL CONCRETE FOOTINGS ARE TO BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. **(NOTE FOR CONSULTANT OR DESIGNER: Removal of Cable Barrier)**
- (TP-69) PRICE BID FOR THIS ITEM SHALL INCLUDE THE FILLING AND TAMPING OF HOLES LEFT AFTER THE REMOVAL OF POST FOOTINGS DURING CABLE BARRIER REMOVAL OPERATION. WORK SHALL BE PERFORMED IN A MANNER APPROVED BY THE ENGINEER. **(NOTE FOR CONSULTANT OR DESIGNER: Removal of Cable Barrier)**
- (TP-70) PRICE BID FOR THIS ITEM SHALL INCLUDE THE COST OF ANY PIPE ADJUSTMENT IF NEEDED, AS WELL AS THE CONCRETE AND STEEL NEEDED FOR THE NEW STRUCTURES, SEE SHEET (Median Drain Detail Sheet Number). **(NOTE FOR CONSULTANT OR DESIGNER: if applicable, Inlet Adjust to Grade)**
- (TP-71) ALL OPEN HOLES MUST BE COVERED WITH STEEL PLATES FOR PERIODS OF NO WORK. **(NOTE FOR CONSULTANT OR DESIGNER: if applicable, Inlet Adjust to Grade)**
- (TP-72) SEE SHEET (Cable Barrier Summary Sheet Number) FOR SIZE AND LOCATION OF DRAINAGE INLETS. **(NOTE FOR CONSULTANT OR DESIGNER: if applicable, Inlet Adjust to Grade)**
- (TP-73) THIS IS AN ESTIMATED QUANTITY TO BE USED FOR POST FOOTINGS AND ANCHOR UNITS FOR THIS PROJECT. THIS ITEM SHALL ALSO INCLUDE REINFORCING STEEL BARS REQUIRED FOR POST FOOTINGS AND ANCHOR UNITS AS SHOWN BY THE MANUFACTURER'S DESIGN. **(NOTE FOR CONSULTANT OR DESIGNER: if applicable, Class AA Concrete)**
- (TP-74) THIS ITEM INCLUDES AN ESTIMATED QUANTITY OF CLASS AA CONCRETE BASED ON 12" DIAMETER AND 36" DEPTH MINIMUM FOOTING DESIGN. THIS ITEM INCLUDES A SOIL

REPORT TO BE PROVIDED BY THE CONTRACTOR FROM THE EXISTING PROJECT NO. **XXXX-XXXX-(XXX)** TO THE CABLE MANUFACTURER INDICATING ALL NECESSARY SOIL INFORMATION REQUIRED FOR THE MANUFACTURER TO DESIGN POST FOOTINGS AND ANCHOR UNITS FOR THIS PROJECT. THE FOUNDATION FOOTING DESIGN SHALL BE COMPLETED AND APPROVED BY THE ENGINEER, PRIOR TO EXCAVATION OF END ANCHOR AND POST FOOTINGS. ALL POSTS AND ANCHOR UNIT FOUNDATION DESIGNS RECOMMENDED BY THE MANUFACTURER FOR THIS PROJECT SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER. THE POST FOOTINGS SHALL NOT BE LESS THAN 12" DIAMETER BY 36" DEEP. FOOTINGS SHALL NOT EXTEND ABOVE GROUND MORE THAN 1". *(NOTE FOR CONSULTANT OR DESIGNER: if applicable, Class AA Concrete)*

-CABLE BARRIER GENERAL CONSTRUCTION NOTES-

THE STATIONS AND LOCATIONS OF THE CABLE BARRIER SYSTEM AND END ANCHOR UNITS PLACEMENT, SHOWN ON THE PLAN AND DETAIL SHEETS, ARE APPROXIMATE. THE ENGINEER SHALL DETERMINE THE EXACT LOCATION OF THE CABLE BARRIER SYSTEM AND/OR END ANCHOR UNITS. THE CONTRACTOR SHALL VERIFY THESE LOCATIONS.

DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SURFACE DRAINAGE, SHALL VISUALLY INSPECT AND/OR MONITOR IT DURING RAINY OR WET WEATHER, AND TAKE NECESSARY STEPS TO ENSURE ALL AREAS IN THE MEDIAN ADEQUATELY DRAINS TO THE SATISFACTION OF THE ENGINEER.

TRAFFIC SAFETY GENERAL CONSTRUCTION NOTES

- (C-200) ALL FIELD MEASUREMENTS PREVAIL ON INSTALLATION AND REMOVAL.
- (C-201) THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN A SCHEDULE OF WORK TO CONTROL THE PROGRESS OF CONSTRUCTION AS FOLLOWS:
 - 1. BRIDGE RAIL REPLACEMENT TREATMENT ON ONE SIDE OF THREE DIFFERENT BRIDGES.
 - 2. GUARDRAIL REPLACEMENT TREATMENT AT THREE DIFFERENT LOCATIONS.
 - 3. A COMBINATION OF (1) AND (2) WHERE A MAXIMUM OF THREE RAIL TREATMENTS ARE ALLOWED TO BE IN PROGRESS SIMULTANEOUSLY.
- (C-202) COMPLETION OF A TREATMENT WILL BE REQUIRED BEFORE BEGINNING WORK AT ANOTHER LOCATION UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- (C-205) THE COST OF REMOVING ABANDONED LIGHT POLE FOOTINGS TO BE INCLUDED IN BID FOR OTHER ITEMS OF WORK.
- (C-206) DELETED
- (C-208) LOCATIONS OF GUARDRAIL WIDENING GIVEN ON SUMMARY SHEETS ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY THESE AREAS. THE FINAL LOCATION OF GUARDRAIL WIDENING TO BE DETERMINED BY THE ENGINEER. GUARDRAIL WIDENING SHALL NOT BE DONE IN AREAS WHERE CURB EXISTS OR WHERE WIDENING WILL CAUSE SLOPE FAILURE.
- (C-209) GUARDRAIL INSTALLATION SHALL BE FLUSH WITH CURBLINE IF CURB EXISTS WHERE GUARDRAIL IS TO BE INSTALLED.
- (C-210) GRADE TO DRAIN ALL AREAS WHERE CONCRETE CURB AND ISLAND ARE TO BE REMOVED. REPLACE ISLAND AREAS WITH 6" OF ASPHALT CONCRETE TYPE B AND STRIPE GORE AREAS IN ACCORDANCE WITH STD. PM1-1-(LATEST REVISION). COST OF INCIDENTAL GRADING TO BE INCLUDED IN THE BID FOR OTHER ITEMS OF WORK.
- (C-211) REMOVE AND REPLACE STRIPING IN GORE AREAS WHERE CURB AND ISLAND ARE TO BE REMOVED, WHERE MEDIAN BARRIER IS TO BE CONSTRUCTED, AND WHERE TRAFFIC CONTROL WARRANTS REMOVAL AND REPLACEMENT OF STRIPING.

- (C-212) MODIFICATION OF CONNECTING BOX TO SLOPED AND GRATED WINGWALLS SHALL BE AS DIRECTED BY THE ENGINEER.
- (C-213) EXISTING GUARDRAIL THAT IS TO BE ELIMINATED SHALL NOT BE REMOVED UNTIL THE PROTECTED OBSTACLE HAS BEEN MODIFIED, REBUILT, OR REMOVED AS REQUIRED BY THE PLANS AND SPECIFICATIONS.
- (C-214) EXISTING GUARDRAIL TO BE REPLACED SHALL NOT BE REMOVED UNTIL ALL MATERIALS, EQUIPMENT AND LABOR ARE AVAILABLE AT THE SITE FOR REPLACEMENT. REPLACEMENT OF THE GUARDRAIL SHALL BEGIN IMMEDIATELY FOLLOWING REMOVAL OF THE EXISTING GUARDRAIL AND CONTINUE UNTIL COMPLETED. NO RAW GUARDRAIL ENDS SHALL REMAIN EXPOSED TO TRAFFIC DURING NON-WORKING HOURS.
- (C-215) ALL WASTE MATERIAL RESULTING FROM HEADWALL AND WINGWALL REMOVAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN MANNER APPROVED BY THE ENGINEER.
- (C-216) THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE TRAFFIC BENEATH THE BRIDGES DURING THE REMOVAL AND RECONSTRUCTION OF BRIDGE PARAPET WALL. BEFORE ANY REMOVAL IS BEGUN, A PROPOSED METHOD OF PREVENTING DEBRIS FROM FALLING ON THE TRAFFIC BELOW THE BRIDGE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. ALL MATERIAL REMOVED FROM THE EXISTING BRIDGE SHALL BE REMOVED FROM THE WORK AREA PROMPTLY. THE AREA SHALL BE CLEARED AT THE CLOSE OF ANY WORK PERIOD.
- (C-218) ALL DIMENSIONS OF THE EXISTING BRIDGE COMPONENTS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY TO CONNECT NEW MATERIAL AND SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY THEREOF.
- (C-219) TRAFFIC OVER THE EXISTING BRIDGE BEING MODIFIED SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL CLOSE THE LANE OF TRAFFIC NEAREST THE WORK BEING PERFORMED. AT NO TIME WILL TWO TRAFFIC LANES ON THE SAME BRIDGE BE CLOSED TO TRAFFIC.
- (C-220) THE CONTRACTOR SHALL FURNISH SUCH LIGHTS, SIGNS, BARRIERS, WATCHMEN, ETC. ADJACENT TO THE CURB BEING MODIFIED, AS MAY BE NECESSARY TO PROTECT THE TRAVELING PUBLIC THROUGH THE PORTION UNDER CONSTRUCTION.
- (C-221) THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE AREAS UNDER THE BRIDGES FROM FALLING DEBRIS AND BE SOLELY RESPONSIBLE FOR SAFEGUARDING THESE AREAS.
- (C-222) LANE WIDTHS AND OTHER LINE DIMENSIONS SHALL REMAIN AS MARKED PREVIOUSLY.