					YEAR	SHEET NO.	TOTAL SHEETS

6. [illegible]

A. [illegible] POWER LEAD-IN WIRE FOR INTERSECTION SIGNAL INSTALLATION SHALL BE NO. 8 AMERICAN WIRE GAUGE SOLID COPPER CABLE FOR OPERATION ON A 120 VOLT SYSTEM. AND SUITABLE FOR USE AN CONDUCTOR THE VOLTAGES NOT EXCEEDING 75 DEGREES CENTIGRADE. INSULATION, CONSTRUCTION, AND TESTS SHALL BE IN ACCORDANCE WITH THE NEW YORK REQUIREMENTS OF THE LATEST EDITION OF THE INSULATED CABLE ENGINEERS ASSOCIATION STANDARD S-68-516 "RUBBER INSULATED WEATHER-PROOF INSULATED WIRE AND CABLE FOR THE TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY".

B. [illegible] WIRE: CONDUCTORS SHALL BE STRANDED, ANNEALED COPPER CONDUCTOR. COPPER WIRE. BEFORE INSULATION OF STRANDING, SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS, DESIGN STANDARD B-33 "SPECIFICATION FOR TINNED SOFT OR ANNEALED COPPER WIRE FOR ELECTRICAL PURPOSES" (FOR COATED WIRE). STRANDING SHALL BE CLASS B. IN ACCORDANCE WITH THE LATEST EDITION OF ASTM B8 "SPECIFICATION FOR CONCENTRIC-LAY-STRANDED COPPER CONDUCTORS, HARD, MEDIUM-HARD OR SOFT".

C. INSULATION: INSULATION SHALL CONSIST OF CROSS-LINKED POLYETHYLENE (XLPE) WITH THE REQUIREMENTS OF COLUMN 1 OF THE INSULATED CABLE ENGINEERS ASSOCIATION AND LISTED BY [illegible] AS TYPE U.S.E. 600-VOLT DOUBLE INSULATED.

D. [illegible] SEE ITEM "LUMINAIRES AND LAMPS".

VII. TRAFFIC SIGNAL HEADS

A. GENERAL

1. SIGNAL HEAD MOUNTING

A. INSTALLATION: SIGNAL HEADS SHALL NOT BE INSTALLED AT ANY INTERSECTION UNTIL ALL CABLES SHALL CONDUCTORS, INCLUDING THE INTERSECTION, IN PLACE AND READY FOR OPERATION AT THAT INTERSECTION. EXCEPT THAT THE SIGNAL HEADS MAY BE MOUNTED IF THE FACES ARE NOT DIRECTED TOWARD TRAFFIC OR IF THE FACES ARE COMPLETELY COVERED. IN NO CASE SHALL THE HEADS BE INSTALLED MORE THAN 18 FEET PRIOR TO THE SIGNAL TURN ON. THE CONTRACTOR SHALL CHECK THE FINAL POSITIONING OF THE SIGNAL HEADS FOR OPTIMUM VISIBILITY.

B. [illegible] MOUNTING: [illegible] SIGNAL HEADS, AS SHOWN ON THE PLANS, SHALL BE SUPPORTED BY MOUNTING BRACKETS CONSISTING OF VERTICAL ASSEMBLIES OF 1-1/2 INCH [illegible] MOUNTING BRACKETS SHALL BE VERTICAL. THE DIMENSIONS OF MOUNTING BRACKETS SHALL BE AS REQUIRED TO ADJUST HEADS SHOWN ON PLANS. ALL BRACKETS, ARMS, AND SECONDARY ASSEMBLIES, MOUNTING BRACKETS SHALL BE ATTACHED TO THE POLE WITH A STAINLESS STEEL BANDING. CONSTRUCTION SHALL BE SUCH THAT ALL CONDUCTORS ARE CONCEALED WITHIN THE ASSEMBLY.

C. MAST-ARM MOUNTING: MAST-ARM SIGNAL HEAD ASSEMBLIES SHALL BE RIGID MOUNTED. THE ASSEMBLY SHALL BE FITTED PLATES OR BOTTOM BRACKETS FOR CLEAN AND COMPLETELY ADJUSTABLE IN BOTH HORIZONTAL AND VERTICAL PLANES. THE MAST ARM SIGNAL BRACKET SHALL BE CONSTRUCTED OF A HIGH STRENGTH ALUMINUM. IT SHALL HAVE A MINIMUM OPENING OF 3-1/2 INCHES TO COMPLETELY ENCLOSE THE SIGNAL WIRINGS. THE BRACKET SHALL ACCOMMODATE THE HEADS AND SIZE OF SIGNAL HEADS AS SHOWN ON THE PLANS. IT SHALL BE ATTACHED TO THE SITE AND SHAPE OF THE MAST ARM SHALL BED BY MEANS OF STAINLESS STEEL BANDS.

D. [illegible] VISORS SHOWN ON THE PLANS. 5 INCH DIAMETER SHALL BE FURNISHED AND ATTACHED TO THE SIGNAL HEADS TO PROVIDE A DOWN BACKGROUND FOR SIGNAL INDICATIONS. BACKPLATES SHALL BE CONSTRUCTED OF DURABLE PLASTIC MADE TO VIBRATION & ARE MADE FOR HEAVY WIND.

B. VEHICLE AND PEDESTRIAN TRAFFIC SIGNAL HEADS

1. ASSEMBLY: EACH SIGNAL HEAD SHALL BE A MANUFACTURED ASSEMBLY OF ONE OR MORE SIGNAL FACES OF THE DIMENSIONS, ARRANGEMENT TYPE, TOGETHER WITH ALL BRACKETS AND FITTINGS NECESSARY FOR PROPER MOUNTING WITH THE TYPE OF SIGNAL SUPPORT DESIGNATED ON THE PLANS. EACH SIGNAL FACE SHALL CONSIST OF ONE OR MORE SIGNAL SECTIONS, RIGIDLY AND SECURELY FASTENED TOGETHER. POSITIVELY FASTENED TO CONTROL THE MOVEMENT OF ONE DIRECTION OF TRAFFIC. EACH SIGNAL SECTION SHALL BE A SELF-CONTAINED ASSEMBLY CONSISTING OF AN OUTSIDE WITH HINGED HOUSING DOORS, AND VISORS. THE FACES SHALL NOT BE USED TO FASTEN SIGNAL SECTIONS TOGETHER TO FORM A SIGNAL FACE. ALL SIGNAL HEADS ON A PROJECT SHALL BE THE PRODUCT OF ONE MANUFACTURER. EXCEPT FOR PEDESTRIAN HEADS, TERMINAL BLOCKS OF SUITABLE SIZE SHALL BE PLACED IN THE BOTTOM SECTION OF THE SIGNAL HEADS, EXCEPT IN THE CASE OF MAST ARM PEDESTRIAN SIGNAL HEADS, WHERE THE TERMINAL BLOCK SHALL BE PLACED IN THE TOP SECTION.

2. HOUSING: THE HOUSING FOR EACH SIGNAL SECTION SHALL BE MADE OF A DURABLE MATERIAL. IT SHALL BE DUST-TIGHT AND FREE FROM FLAWS, CRACKS, BLOWHOLES, AND OTHER IMPERFECTIONS. THE HOUSING SHALL BE YELLOW WITH BLACK DOORS. IT SHALL BE DESIGNED AS A SELF-CONTAINED UNIT FOR SEPARATE MOUNTING OR INCLUSION IN A SIGNAL FACE CONTAINING TWO OR MORE SIGNAL SECTIONS RIGIDLY AND SECURELY FASTENED TOGETHER. IT SHALL BE EQUIPPED WITH HINGED DOORS ON THE TOP OF BOTTOM SO THAT IT MAY BE MOUNTED BETWEEN WATERPROOF SUPPORTING BRACKETS, AND THAT IS DIRECTED AT ANY ANGLE IN THE HORIZONTAL PLANE. IT SHALL BE EQUIPPED WITH POSITIVE LOCKING DEVICES TO MAINTAIN A SPECIFIC ANGLE OF DIRECTION WHEN IN PLACE. THE DOORS SHALL BE SUITABLY HINGED AND HELD SECURELY TO THE BODY OF THE HOUSING BY SIGNAL STAINLESS STEEL LOCKING DEVICES. ALL OTHER DOORS SHALL BE HINGE PINS. LENS CLAMPS SCREWS, ETC. SHALL ALSO BE OF STAINLESS STEEL MATERIAL. A NEOPRENE OR SILICON GASKET SHALL BE USED BETWEEN THE LENS AND REFLECTORS TO ENSURE DUST AND MOISTURE.

3. VISORS: THE VISORS FOR EACH SIGNAL SECTION SHALL BE A DURABLE MATERIAL NOT LESS THAN 0.125 INCH THICK, 18 INCHES LONG, 12 INCHES. IT SHALL BE DESIGNED TO FIT TIGHTLY AGAINST THE BODY OF HEADS OF FOUR CONTINUOUS SIDES AND SHALL NOT REDUCE ANY PERCEPTIBLE FILTRATION OF LIGHT BETWEEN IT AND THE HOUSING DOORS. VISORS SHALL BE AT LEAST 9-1/2 INCHES LONG FOR ALL 12 INCH DIRECTION SIGNALS. SHALL HAVE SLIGHTLY DOWNWARD, AND SHALL BE OF THE SAME MATERIAL. PEDESTRIAN HEAD VISORS MAY BE OF THE DOWNWARD TYPE WITH A DEPTH OF 4 1/2 INCHES AND A THICKNESS OF 0.125 INCH. THE OUTSIDE UNIT AND VISORS SHALL BE DESIGNED AS A WHOLE SO AS TO ELIMINATE DUSTING WHEN CONTACTING THE UNIT FROM ABOVE OR BELOW. [illegible]

4. LENSES: LENSES SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN NATIONAL STANDARD INSTITUTE SPECIFICATION DIE.ANSI/INSTITUTE OF TRANSPORTATION ENGINEERS TECHNICAL REPORT "VEHICLE TRAFFIC CONTROL SIGNAL HEADS" OPTICAL SPECIFICATIONS. LETTERING SHALL NOT EXCEED ONE LENSES EXCEPT FOR PEDESTRIAN, SIGNAL. MINIMUM 12 INCH DIAMETER SIGNAL LENSES SHALL BE PLANO-CONVEX.

5. [illegible] LENSES SHALL CONSIST OF AN ARROW INDICATION DESIGNED TO MEET THE LATEST EDITION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS' SPECIFICATION 4.06 "VEHICLE TRAFFIC CONTROL SIGNAL HEADS" FOR A 12 INCHES. BLACK ON DARK GRAY COVER. SHALL BE ATTACHED TO THE COVER SURFACE OF THE LENS IN SUCH A MANNER THAT WHEN ILLUMINATED THE ARROW WILL BE ILLUMINATED POSITION OF THE LENS. THE COVER SHALL BE OF A THICKNESS SUFFICIENT TO TOTALLY HIDE THE LIGHT FROM A 100 WATT LAMP PLACED BEHIND IT AND SHALL BE BONDED OR FUSED INTO THE GLASS OR POLYCARBONATE BONDED INTO THE POLYCARBONATE MATERIAL. THE COVERS SHALL BE MADE AND DURABLE AND SHALL NOT FADE OR FLAKE. AN ARROW SHALL NOT BE SUBSTITUTED.

6. [illegible] LENSES: "DON'T WALK" AND "WALK" LENSES SHALL BE RECTANGULAR WITH A SIDE DIMENSION OF 12 INCHES IF TWO PIECES OR WITH DIMENSIONS OF 18-1/2 INCHES WIDE BY 18-1/2 INCHES HIGH IF ONE PIECE. THEY SHALL BE OF A MINIMUM PRISMATIC GLASS OR POLYCARBONATE NOT LESS THAN THE WIDTH OF THE LETTERS USED FOR THE WORDS "DON'T WALK" OR "WALK". THE LETTERING OF THE WORDS SHALL BE UPPER CASE LETTERS OF THE SAME HEIGHTS. A MINIMUM OF 9 INCHES AND A MINIMUM OF 6 INCHES. THE INDICATION: "DON'T WALK" SHALL BE IN ORANGE COLOR, AND THE INDICATION "WALK" IN LAYER WHITE. THE INDICATIONS SHALL BE FORCED ON THE LENSES IN THE SAME MANNER AS SPECIFIED FOR ARROWS. THE "DON'T WALK" AND "WALK" INDICATIONS SHALL BE LEGIBLE TO ANYONE WITH NORMAL VISION AT A DISTANCE FROM 18 FEET TO THE FULL WIDTH OF THE ROAD TO BE CROSSED.

7. REFLECTORS: REFLECTORS SHALL BE MOUNTED IN THE HOUSING. A REFLECTOR MOUNTING IS TO BE PROVIDED ON NONMETALLIC MATERIAL, SO ARRANGED THAT THE REFLECTOR CAN BE EASILY REMOVED OR SWUNG OUT OF THE HOUSING IN ORDER TO MAINTAIN AND ACCESSORY WIRING. THE METHOD OF MOUNTING AND FASTENING SHALL BE SUFFICIENTLY RIGID TO SECURE PROPER ALIGNMENT BETWEEN THE LENS AND REFLECTOR WHEN THE DOOR IS CLOSED. MOUNTING REFLECTORS SHALL BE PROVIDED MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION DIE.ANSI/INSTITUTE OF TRANSPORTATION ENGINEERS TECHNICAL REPORT 1 "VEHICLE TRAFFIC CONTROL SIGNAL HEADS". ACTUALLY FOR/ANSI REFLECTORS MAY BE USED AS AN ACCEPTABLE ALTERNATE.

8. LAMP SOCKETS: THE LAMP SOCKET SHALL BE MADE OF MOLDED PORCELAIN. IT SHALL BE SO CONSTRUCTED THAT IT WILL BE POSSIBLE FOR THE LAMP TO ROTATE ABOUT THE AXIS IN ORDER TO POSITION THE OPENINGS OF THE LAMP FILAMENT. IT SHALL BE POSSIBLE TO ROTATE THE LAMP AND SOCKET WITHOUT THE USE OF TOOLS. IF HIGH DIAMETER SIGNALS SHALL ACCOMMODATE TRAFFIC SIGNAL LAMPS WITH A 3 INCH FOCAL LENGTH.

9. WIRING: WIRING FOR EACH LAMP RECEPTACLE SHALL BE PROVIDED BY COLOR CODED NO. 18 GAGE LEAD WIRES WITH PROVIDING THERMOPLASTIC INSULATION AND A MINIMUM LENGTH. WIRES SHALL BE OF SUFFICIENT LENGTH TO EXTEND TO THE TERMINAL BLOCK WITH THE REFLECTOR PLACED WITHOUT STRAINING.

10. LAMPS: A MINIMUM 150 WATT, 120 VOLT, 4000 HOURS TRAFFIC SIGNAL LAMP OF 0.600 INCH LIFE. RATING CONSTRUCTED BY THE MANUFACTURER. SHALL BE USED IN ALL 12 INCH VEHICLE TRAFFIC SIGNAL INDICATIONS. A MINIMUM 100 WATT, 120 VOLT, 4000 HOURS TRAFFIC SIGNAL LAMP OF 0.600 INCH LIFE RATING CONSTRUCTED BY THE MANUFACTURER. SHALL BE USED IN ALL 8 INCH DIRECTION SIGNAL INDICATIONS. ALL TRAFFIC SIGNAL LAMPS MUST BEAR CONSTRUCTED MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS SPECIFICATION 12.03 "TRAFFIC SIGNAL LAMPS".

C. PEDESTRIAN VISIBILITY TRAFFIC SIGNAL HEADS

1. GENERAL: PEDESTRIAN VISIBILITY TRAFFIC SIGNAL HEADS AND THE INSTALLATION THEREOF SHALL CONFORM TO THE PROVISIONS HERE. EXCEPT THE PROVISIONS OF OTHER UNITS AND VISORS SHALL NOT APPLY. THE PEDESTRIAN VISIBILITY TRAFFIC SIGNAL HEADS SHALL BE CONSTRUCTED OF DIE CAST ALUMINUM.

2. VISIBILITY: THE VISIBILITY OF THE SIGNAL INDICATION SHALL BE ADEQUATE WITHIN THE SIGNAL HEADS TO FIT THE LAYOUT OF LANES IN WHICH TRAFFIC IS TO BE CONTROLLED. DURING DAYLIGHT, THE SIGNAL INDICATIONS SHALL BE VISIBLE ONLY IN THE AREAS OR LANES DESIGNATED, DURING DARKNESS. A FAINT GLOW VISIBLE TO THE SIDE WILL BE PERMISSIBLE. EXTERNAL ILLUMINATION SHALL NOT CAUSE A FALSE INDICATION. NO SIGNAL A SIGNAL INDICATION IN ONE SIGNAL SECTION CAUSE A SIGNAL INDICATION IN ADJACENT SIGNAL SECTION. EACH SECTION OF A SIGNAL FACE SHALL PROVIDE A MINIMUM 12 INCH DIRECTIONAL BOUND INDICATION OR ARROW INDICATION MEETING THE INSTITUTE OF TRANSPORTATION ENGINEERS' DIMENSIONS AS REQUIRED.

3. VISORS: EACH SECTION SHALL BE PROVIDED WITH A SHEET ALUMINUM SUN VISOR.

4. PROJECTION: THE INDICATION OF EACH SIGNAL HEAD, WHEN NOT PROJECTED, SHALL BE VISIBLE FROM ANYWHERE WITHIN 15 DEGREES OF THE OPTICAL AXIS. THE SIGNAL HEAD SHALL BE ABLE TO BE DIRECT AN ANGLE BETWEEN 10 DEGREES ABOVE AND 10 DEGREES BELOW THE HORIZONTAL, AND SHALL BE DIRECT AT A DEGREES (ONE TOP) OF 8 DEGREES CONTRACTED BELOW THE HORIZONTAL.

5. COLOR SCHEME: PEDESTRIAN SIGNAL HEADS SHALL HAVE THE STATED COLORS SCHEME.

6. CONTRASTING: THE SIGNAL SECTION WITH THE YELLOW INDICATION, PRIOR TO PROGRAMMING WHEN DIRECTED DOWNWARD 5 DEGREES FROM A HORIZONTAL SHALL PROVIDE A MINIMUM CONTRASTING OF 3 DEGREES FROM A DIRECTION OF THE AXIS AND A MINIMUM CONTRASTING OF 10 DEGREES HORIZONTALLY IN EACH DIRECTION FROM THE AXIS. THE SIGNAL HEAD WITH YELLOW INDICATION SHALL BE PROGRAMMED SO THAT A MINIMUM CANDLE POWER OF 2000 CANDLES CAN BE DIRECTED ALONG THE OPTICAL AXIS AND A CANDLE POWER OF LESS THAN 50 CANDLES DIRECTED AT 1/2 DEGREE HORIZONTAL FROM THE AXIS AND ANY CANDLE POWER LIGHT IN DIRECTED FROM 1 TO 10 DEGREES HORIZONTAL FROM THE AXIS UNDER THE SAME CONDITIONS. THE CANDLE POWER OF EACH INDICATION SHALL BE AT LEAST 5 PERCENT OF THE RED INDICATION, AND THE CANDLE POWER OF THE GREEN INDICATION SHALL BE AT LEAST 50 PERCENT OF THE YELLOW INDICATION.

7. LAMPS: LAMPS FOR THE SIGNAL HEADS SHALL BE 100 WATT, 120 VOLT, [illegible] WITH A MINIMUM AVERAGE RATED LIFE OF [illegible] HOURS.

8. MOUNTING BRACKETS: MOUNTING BRACKETS SHALL BE PROVIDED TO ENCLOSURE BEHIND THE CONTRASTING [illegible] A FUNCTION OF INDIVIDUAL ENCLOSURE ILLUMINATION. EACH SIGNAL HEAD FOR INDICATION OPERATION: TO PROVIDE A FIRM FOR DAYTIME OPERATION.

VIII. TRAFFIC SIGNAL POLES AND REFERENCE

A. GENERAL

1. GENERAL: ALL TRAFFIC SIGNAL POLES SHALL CONFORM TO THE LATEST EDITION OF THE AMERICAN ASSOCIATION FOR STATE HIGHWAY AND TRANSPORTATION OFFICIALS' STANDARD SPECIFICATIONS FOR STRUCTURES SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" HOWEVER WITHIN WHICH LOCK OF 80 MILES PER HOUR AND A 30 PERCENT GUST FACTOR. THE POLES SHALL ALSO ACCOMMODATE WIND LOADINGS WHICH MAY CAUSE DEFLECTIONS OF THE MAST ARM IN THE VERTICAL PLANE. THESE DEFLECTIONS SHALL NOT BE SUCH THAT THERE IS LESS THAN A 18 FOOT CLEARANCE BETWEEN THE ROADWAY AND THE LOWEST POINT OF THE SIGNAL ASSEMBLY.

2. SIGN DIMENSIONS: ALL TRAFFIC SIGNAL POLES SHALL BE DESIGNED ON SIGN DIMENSIONS IN THE MANUFACTURER INDICATIONS POLE AND ARM DIMENSIONS AND ATTACHMENT OF HEADS ALONG WITH SIGNAL WIRING, PROJECTED AREAS, AND TYPE OF MOUNTING THAT IS IS DESIGNED TO ACCOMMODATE. ALL NEW TRAFFIC SIGNAL POLES OR POLES NOT PREVIOUSLY APPROVED WILL REQUIRE SUBMISSION OF DESIGN CALCULATIONS ALONG WITH THE SHOP DRAWINGS.

3. SHAFT: THE SHAFT SHALL INCLUDE WITH EXTENSIVE ANCHOR BOLTS, WASHERS, AND NUTS CONFORMING TO SECTION 8.03. THE IS OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS. ANCHOR BOLT WASHERS CONFORMING TO THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS SPECIFICATION: FOR WELD ALSO BE ACCEPTABLE. IT ALSO SHALL INCLUDE COVER PLATES, A HANDHOLE AND GROUND LUGS FOR NUTS. A SUITABLE COVER FOR ATTACHING THE MAST ARM TO THE SHAFT. THE SHAFT SHALL INCLUDE A HIGH STRENGTH ADAPTERS AS A CONNECTOR FOR SIGNAL WIRING.

4. CONSTRUCTION: POLES MUST BE A CONTINUOUS LONGITUDINAL FORM IS SPECIFIED ON THE PLANS. THE ARMS ARE LIKE WITH THE LONGITUDINAL ARM TO BE MOUNTED ON THE SAME VERTICAL PLANE AS THE SIGNAL ARM.

5. ARMS: ALL SIGNAL POLE ARMS SHALL INCLUDE A HIGH STRENGTH ADAPTERS AS CONNECTOR FOR SIGNAL WIRING AND REMOVABLE END CAPS.

B. STEEL TRAFFIC SIGNAL POLES

1. GENERAL: STEEL TRAFFIC SIGNAL POLES SHALL CONFORM TO SPECIFICATIONS HERE OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS AND THE REQUIREMENTS ON THE PLANS. THE POLES AND ARMS SHALL BE FABRICATED MEANING HOT ROLLED OF THE LENGTH OF STRUCTURE. STEEL SHEET OF NOT LESS THAN NO. 8 MANUFACTURING STANDARD GAGE MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGN SPECIFICATION A588, "SPECIFICATION FOR STEEL BARS, LOW-CARBON, FABRICATED FOR STRUCTURAL USE". AS AN ACCEPTABLE ALTERNATIVE. THE POLES AND ARMS SHALL HAVE A MINIMUM OF 12 GAUGE. HOT ROLLED OF THE LENGTH OF STRUCTURE STEEL SHEET OF NOT LESS THAN NO. 8 MANUFACTURING STANDARD GAGE MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE ASTM SPECIFICATION A588 "SPECIFICATION FOR STRUCTURAL QUALITY HOT ROLLED CARBON STEEL SHEET AND STRIP" OR A588 "SPECIFICATION FOR HIGH-STRENGTH LOW-ALLOY COLUMBIUM-VANADIUM STEEL OF STRUCTURAL QUALITY" WITH A MINIMUM YIELD STRENGTH OF 50 KILOPOUNDS PER SQUARE INCH AND A MINIMUM SILICONE CONTENT OF 0.40 PERCENT. ONLY ONE CONSTRUCTION WELD AND NO TRANSVERSE WELDS. WELD TO BE REQUIRED IN THE FABRICATION OF THE SHAFT OF ARMS CONSTRUCTION MATERIAL GAGE ARMS CONSTRUCTED FOR LOCKING OF ARMS OF OPERATOR MUST HAVE ROLLED RECTANGULAR ADAPTERS SHAPED TO DUPLICATE FULL STRENGTH OF THE ADJACENT SHAFT SECTIONS TO RESIST BENDING MOMENTS.)

2. CONSTRUCTION: STEEL TRAFFIC SIGNAL POLES SHALL BE CONSTRUCTED TO THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS GUIDE "SPECIFICATION FOR ZINC (HOT-DIP) GALVANIZED COATINGS ON IRON AND STEEL PRODUCTS".

C. ALUMINUM TRAFFIC SIGNAL POLES AND REFERENCE

1. GENERAL: ALUMINUM TRAFFIC SIGNAL POLES SHALL CONSIST OF A [illegible] ALUMINUM BASE AND SHAFT. THE SHAFT SHALL BE SEAMLESS OF TUBE OF SEAMLESS TUBING. MEETING THE REQUIREMENTS OF SPECIFICATIONS HERE OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS HAVING A VERTICAL HOUSING, 6.125 INCH MIN. SEAMLESS. THE SHAFT SHALL HAVE NO LONGITUDINAL WELDS AND CIRCUMFERENTIAL WELDS EXCEPT THOSE JOINING THE SHAFT TO THE BASE. ALL PROJECTIONS SHALL HAVE A BEZ SPACE BETWEEN THE SHAFT AT THE BASE.

2. FINISH: THE SHAFT SHALL HAVE A UNIFORM PAINTED FINISH. THE SHAFT [illegible] SHALL BE PROTECTED DURING SHIPMENT AND INSTALLATION.

D. CONDUIT

1. GENERAL

A. METALLIC CONDUIT AND FITTINGS

1. CONDUIT: METALLIC CONDUIT SHALL BE RIGID STEEL CONDUIT MEETING THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION C80.1 "SPECIFICATIONS FOR ZINC-COATED RIGID STEEL CONDUIT".

2. FITTINGS: METALLIC CONDUIT FITTINGS SHALL BE ZINC COATED AND SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE AMERICAN NATIONAL STANDARDS INSTITUTE SPECIFICATION C80.4 "SPECIFICATIONS FOR FITTINGS FOR RIGID METAL CONDUIT AND ELECTRICAL METALLIC TUBING".

B. NON-METALLIC CONDUIT AND FITTINGS

1. CONDUIT: NON-METALLIC CONDUIT SHALL BE RIGID POLYVINYL CHLORIDE MEETING THE REQUIREMENTS OF THE LATEST EDITION OF FEDERAL SPECIFICATION L-P-1035A "PLASTIC CONDUIT, PLASTIC TUBES AND TUBING, HEAVY WALLED POLYVINYL CHLORIDE RIGID". TYPE II - HIGH IMPACT STRENGTH, CHEMICAL RESISTANCE, GRADE E - ELECTRICAL QUALITY.

4	12/17/93	[illegible] SECTION VIII.A.3 REVISIONS	J.P.J.	L.O.V.	
3	11/21/91	SECTION VIII.A.3.	M.A.J.	P.J.E.T.	
2	7/18/91	SECTION VIII.A.1.	M.A.J.	P.J.E.T.	
1	8/1/90	TOTAL REVISION	M.A.J.	P.J.E.T.	
NO.	DATE	REVISIONS	BY	APP'D	

KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL SPECIFICATIONS

TE120C 8/1/90

FHWA APPROVAL REQUIRED			APP'D		
DESIGNED	J.P. HOFSTETTER	J.P.J.	QUANTITIES		TRACED
DESIGN CK.	M.A. DETAILS CK.	M.A.J.	QUANT. CK.		TRACE CK.