

**APPROVED MATERIALS/EQUIPMENT LIST FOR TRAFFIC SIGNALS**  
**(Any questions or clarification on materials/equipment call Debi Sadar in the Traffic Signal Operations**  
**Division @ 303-651-8699)**

**SIGNAL POLES/MAST ARMS and FOUNDATIONS-----**

*(For use on State Highway intersections/streets only)*

**Signal Pole/Arm**-----C-DOT Standard Specification, S-614-40/ S-614-40-A Galvanized finish.  
NOTE : S-614-40 is to be used for any double mast arm (any length), and or single mast arm application greater then 55' in length.  
S-614-40-A is to be used for all single mast arm 55' in length and under.

**Foundation**----- Specs and details are found on the drawings for the poles/arms.

*(For use on City of Longmont intersections/streets)*

**Pole/Arm** -----Valmont number LMT DB00934, Galvanized finish.

**Foundation**----- drawing # M07213SIG01.DWG .  
The drawing details for the foundations on the Longmont Standard Specs can be attained from the City of Longmont Traffic Signal Operations Division.

**STREET LIGHT LUMINARES/ARMS-----**

Street light arms shall be ordered w/mast arm and pole using the appropriate made to fit arm for the style that is being purchased. It shall be a 15' arm, and the luminaire shall be purchased from the City of Longmont LPC warehouse using the flat cobra GE fixture, HPS, photocell input volts 120/240, either a 150 watt or a 250 watt HPS clear dual-arc mogul base, which will be called for on the plans or directed by project manager. The mounting height for all street lights shall be at 35' on the pole, *(please note this is a different mounting height for street lights that Longmont calls out for and is not the mounting height that the State normally uses, therefore it will be necessary to ensure when placing any signal pole/arm order that this is known).*

**PEDESTRIAN POLES w/small bases-----**

Manufacture is Pelco Inc.

Ped Pole	# PB-5100-Length-PNC
Aluminum T - Base	# PB-5334-Blank-3S-GL-PNC
Anchor Bolts	# PB-5306-GLV
Pole Cap	# PB-5402-PNC

Foundation will be a concrete poured base as per our Specs.

## **CONTROLLER CABINETS and INTERNAL EQUIPMENT/COMPONENTS-----**

Econolite stretch (P) TS-2 16 position load bay cabinet built as per **Longmont Standard**, Econolite has the build details on file. Refer to design plans as to exact needed equipment for intersection as in ----- how many detector slots will be needed. Econolite controller shall be either the ASC/3 or the Cobalt, this shall be specified in the plans. Internal equipment is supplied along with cabinet from Econolite.

## **VIDEO DETECTION SYSTEM-----**

FLIR FC-334-FC-SERIES, 320 X 240, NTSC, 34 DEGREE FOV, 13 MM LENS  
BNC 2 – Wire-36”  
BNC - 3071 – 75- BNC Connector – Male  
HESCO HE75CX w/Baseplate – Video Surge Suppressor 750 HM (EDCO style)  
Universal Mount – Universal Mount  
Traficon – Bell Box  
Kargor Pigtail – Pig tail, assembled  
Traficon – VIP 3D.25 – VIP 3D.2s Single Slot  
Fuse Block 4 Position  
X4310657-00-1000-5 Conductor Wire 1000 ft. Spool  
Traficon – Key Pad

The system shall include cameras, cable, processor cards and all mounting hardware for the complete installed video system.

## **FIBERGLASS CABINET BASE-----**

Nordic fiberglass Inc. base for NEMA cabinets sizes (P) and (M)-----  
Product numbers are # GS - 44-26-MG 37x20 (P44)  
# GST – 30-18-18-GR 24x13 (M)

## **PULL BOX-----**

New Basis West LLC Polymer concrete fiberglass reinforced box, pull box lids must have the words “Traffic Signal” permanently printed on them. All pull boxes need to be 20K load rated.

Small ----- 11” x 18” x 12” FCA 111812-00030  
Medium---- 13” x 24” x 12” FCA 132412-00030  
Large ----- 17” x 30” x 12” FCA 173012-00030  
X-Large pull box w/split lid 24”x36”x18”

**TRAFFIC SIGNAL HEADS-----**

McCain Polycarbonate (3) section “12-12-12” yellow w/black tunnel visors  
Part # 3YP12EMPTYBT

McCain Polycarbonate (3) section “8-8-8” yellow w/black tunnel visors  
Part # 3YP8EMPTYBT

McCain Polycarbonate (4) section “12-12-12-12” yellow w/black tunnel visors  
Part # (4YP12EMPTYBT)

Current vendor is Traffic Signal Controls @ 303-772-2787, these part numbers are specifically from TSC. For any questions please call -- The City’s Traffic Signal Operations Division, Debi Sadar at (303-651-8699) for information.

**PEDESTRIAN HEADS-----**

McCain die cast aluminum 16” x 18” clamshell style, yellow (it takes both part numbers to make a complete item)  
Part # (M32214 and M27168)

**PEDESTRIAN FACE COUNTDOWN ETL LED’s-----**

GE Lumination Hand/Man Countdown insert LED module, Model # PS7-CFF1-26A

**SIGNAL FACE LED’s-----**

*All LED’s shall be ETL certified*

Dialight -- 12” RED Ball LED	Part # 433-1210-003XL
Dialight -- 12” YELLOW Ball LED	Part # 433-3230-901XL
Dialight -- 12” GREEN Ball LED	Part # 433-2220-001XL
Dialight -- 12” RED Arrow LED	Part # 432-1314-001XOD
Dialight -- 12” YELLOW Arrow LED	Part # 431-3334-901XOD
Dialight -- 12” GREEN Arrow LED	Part # 432-2324-001XOD
Dialight -- 8” RED Ball LED	Part # 433-1110-003XL
Dialight -- 8” YELLOW Ball LED	Part # 433-3130-901XL
Dialight -- 8” GREEN Ball LED	Part # 433-2120-001XL

GE GT1 -- 8” or 12” Ball LED’s (red,yellow,green)  
GE GT1 -- 8” or 12” LED Arrows (red,yellow,green)

LeoTek -- 8” Ball LED’s (red,yellow,green) Part # TSL-08-LX-1L6-A1-P2

LeoTek -- 12” Ball LED’s (red,yellow,green) Part # TSL-12-LX-116-A1-P2

LeoTek -- 12" Arrow LED's (red,yellow,green) Part # TSL-12(RorYorG)A-1L6-A1

**PEDESTRIAN PUSHBUTTONS**-----

ADA low profile Bulldog style made by Polara Engineering Part # (BDLM – Y and BDPM – Y) takes both part numbers to complete the item.

**PEDESTRIAN PUSHBUTTON SIGNS**-----

For any application calling for the countdown style Peds then the pushbutton signs shall be R10-3e, stick on type, size 8 ½" X 5", Brand type is Traffic Signal Controls.

**AUDIBLE PEDESTRIAN SIGNALS**-----

If audibles are called for on a project then the ADA audible pedestrian signal (APS) with the vibra-tactile arrow with a LED and sound shall be used. *The signs will be built into and on each APS, and special details will be given by Debi Sadar in the Traffic Signal Operations Division (303-651-8699).* This will be specified in the plans or directed by the Traffic Signal Operations Division.

Approved manufacture is Polara -----

*(All 3 part #'s listed below are necessary for one unit APS)*

Part # EN45AN0 – Y, EZ ComNavigator 4 – wire (5 x 7) Int'l Walk Sign, Yellow, no Brl/v

Part # PHCU4W – Ped head control unit 4 – wire

Part # 850-288-12 12' interconnect cable

**MOUNTING BRACKET HARDWARE**-----

Pelco Brand – Stellar Series astro brackets and side of pole 1- way arm kit for signal heads and signs—

Part # AS-3004 S.S. Band mount stellar series astro brac (clamp only)

Part # AS-0116-56 S.S. for Stellar Astro brac assy for use with 3/4/5 section signal heads, specify tube length

Part # AS-0111-56 S.S. for Stellar Astro brac assy (2) - way variable, specify tube length

Part # AB-2003 Gusseted tubes X length, if needed for special applications order separately

Part # AB-0155-42 this is a mini astro brac for use with a opticom head/sensor mounting

Part # SP-5419-P29 a set of side of pole Ells for each SOP signal head used

Part # AS-0105-CTC-BL-SS-PNC sign mounting brac w/hardware, specify length CTC for sign mount

Part # AS-0128-CTC-BL-SS-PNC for stellar series street name/or large sign mounting specify tube length

*All astro bracket clamps for the signal heads and signs shall be the Stellar Series only.*

**CABLE AND WIRING**-----

Refer to the City of Longmont Traffic Signal Specifications/Standards for the details of all wiring that shall be used.

**EMERGENCY PRE-EMPT SYSTEM-----**

Global Technologies Opticom Equipment-----

Sensors -- 722 and or 721 heads

Phase selector cards -- 2 channel (only)

*(3-M opticom cable 138, shall be used for the wiring of the sensors.)*

**RADAR DRIVER FEEDBACK SIGNS AND VARIABLE SPEED SIGNS-----**

Radar DFS and Variable Speed Signs shall be the Speed Check Brand. If either of these signs are called for on a project then you shall call ---- Debi Sadar in the Traffic Signal Operations Division (303-651-8699) to get details.

*Variable Speed Sign -- Speed Check 15" VSC-1520, 30" X 30", AC +, Diamond Grade White w/ black lettering, shall include the (2) wire driver harness.*

*Radar Feed Back (Your Speed) Sign – Speed Check 15" VSC-1520, 30" X 30", AC +, slow down option included, Diamond Grade White or Safety Green w/ black lettering, shall include the (2) wire driver harness.*

**SCHOOL FLASHER SYSTEM-----**

School flasher system shall be built to the City of Longmont Standard Specification. Approved vendor is Traffic Signal Controls in Longmont. Please call --- The City's Traffic Signal Operations Division, Debi Sadar at (303-651-8699) to acquire the details of the Specification and Wiring diagram.

**SIGN MOUNTING BRACKETS**

Traffic Control, Regulatory, Informational and other signs shall be mounted on the mast arms and signal poles with the Pelco Astro Sign Brac system.

Stellar Series Clamp/Band Mount --- Part # AS-0105- (size of tube), Tube CTC based on sign size and band length based on size of mast arm or pole where signs mount.

Street Name Signs shall be mounted on the mast arms with the Pelco Astro Brac system using the Stellar Series Clamp/Band Mount and sign clamps---- Part # AS-0128- (length of tube)

**BACK PLATES**

Back Plate details --

Shall be the aluminum louvered in Black. If it is called for on plans or directed by Project Manager the 1" reflective tape can be added to back plates at an additional cost.

- (3) section 12-12-12 back plate (shall be a one piece unit) # BP – 3S L
- (4) section 12-12-12-12 back plate (shall be a one piece unit) # BP – 4S L
- (5) section side by side 12” back plate # BP –5S23 L

Current vendor is Traffic Signal Controls @ 303-772-2787. For any questions please call -- The City's Traffic Signal Operations Division, Debi Sadar at (303-651-8699) for information.

### **BOLLARD**

DBE Mfg. & Supply, LLC  
(970) 392-9800 - Phone

Bollard detail – 4” X 7’ SCH40 steel Bollard filled w/concrete with yellow plastic cover to sleeve 4’ – 5’ over top portion of bollard, (no primer or paint) Note: 4” SCH40 pipe has an outside diameter of 4.5” and with plastic outside cover the diameter is approx. 4.95”. When ordering bollards from approved vendor refer to City of Longmont Standard they should have on file.

### **LOOP VALVE BOX**

Round Loop Valve pull box shall be a valve stem type pull box made of *cast-iron or steel*. The pull box shall have the capability of accepting riser rings for future roadway overlays. The lid shall have the word "traffic" printed on it. Lid shall be 5 ¼” diameter. Approved vendor is EJ USA- Denver (303-286-8014). Equal or comparable loop valve box/lid is allowed. There may be different lengths of valves called for on different projects, this will be determined by project/plans.

### **UNINTERRUPTED POWER SUPPLY (battery back up system)**

Shall be the Ultra Power Stealth 3000 Inverter (170 style)  
UPStealth 500 watt Nema Shelf Mount Battery (3440)