STANDARD PLANS
FOR STREET LIGHTING

MAY 2019
## STREET LIGHT DRAWING INDEX

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TEAR DROP POLE AND FIXTURE – SL-01
MAIN ARTERIAL LED STREET LIGHT

POLYURETHANE FINIAL

PHOTOCELL-COLOR BLACK
8 YEAR FULL WARRANTY

HORIZONTAL ARM ADAPTOR:
CAST ALUMINUM #356MM ALLOY
W/ TWIST-LOCK PHOTO CONTROL
RECEPTACLE

NECK:
CAST ALUMINUM

UPPER HOUSING:
DIE-CAST ALUMINUM

SNAP LATCH:
TOOL-LESS STAINLESS STEEL

INTERNALLY HINGED HOUSING:
DIE-CAST ALUMINUM

LED DRIVER:
AUTO SENSING
120–277 VAC, 530MA
3KV SURGE SUPPRESSION

HEAT SINK/LENS FRAME:
LOW COPPER DIE-CAST ALUMINUM

GLOBE:
MOLDED ACRYLIC
OPTICAL RIBBED TECHNOLOGY

LENS:
TEMPERED GLASS

PHILIPS LEDGINE BOARD:
80 LED-4000K-TYPE 3
IP66 OPTICS CHAMBER

ENLARGED FIXTURE DETAIL

MSL POLE # 20TFS-7.8/4/14S-5'USA/18’R-22’MAD
SHAFT: TAPERED FLUTED STEEL
MINIMUM 16 EPA @ 80 MPH, 1.3 G

35” H x 22” DIA.  HIGH DENSITY ELASTOMER
BASE, DENSITY OF 71 LBS PER CUBIC FT.
1/2” MIN. THICKNESS
PAINTED BLACK WITH A MODIFIED
URETHANE COATING. LOGO PAINTED GOLD

3” X 7” HANDHOLE

ENLARGED DECORATIVE BASE DETAIL

ASSEMBLY COLOR:
BLACK

Layton City
STANDARD DRAWING
SL-01 TEAR DROP FIXTURE
ST—LT-01

DRAWN BY
MTL

SCALE
NONE

DATE
5/11

REVISIONS
5/16

ANCHOR BASE DETAIL
12” BOLT CIRCLE
ANCHOR HOLES 1’ x 36’
GALVANIZED
STANDARD RESIDENTIAL
POLE AND FIXTURE SL-02

SUBDIVISION ROADS –
66' ROW AND LESS

LUMILOCK LED SPECIFICATIONS:
- TYPE III ASYMETRIC DISTRIBUTION.
- 4000K (CCT) 40 LUXEON REBEL ES LED’s ON
  ALUMINUM CORE PCB. SEALED ACRYLIC LENS,
  IP66 RATED.
- MINIMUM 65 COLOR RENDERING INDEX (CRI).
- 120-277 VAC, 50-60Hz AUTO SENSING.
- 10kV/10kA SURGE SUPPRESSION BUILT IN.

TOP VIEW

40 LED MODULE:
TYPE III LUMILOCK,
IP66 RATED

DRIVER COVER:
DIE-CAST ALUMINUM,
TOOL-LESS ENTRY

GLOBE HOLDER:
DIE-CAST ALUMINUM

DRIVER ENCLOSURE:
DIE-CAST ALUMINUM,
TOOL-LESS ENTRY
ACCESS DOOR

SLIP FITTER:
3” I.D.

LUMILOCK LED ASSEMBLY

FASTENERS:
STAINLESS STEEL
HEX HEAD BOLTS

PHOTOCELL:
TWIST-LOCK
8YR WARRANTY

CONCRETE MOW STRIP

COLD TAR EPOXY COATING
UNDERGROUND PORTION OF POLE
4’ MINIMUM

CONCRETE MOW STRIP

MOUNTAIN STATES LIGHTING POLE
#16’OH/12’ EG RTS/3-5,25-BK
POLE: 12’ ABOVE GRADE (16’ OVERALL)
SHAFT: TAPERED STEEL
MIN 6 EPA, DIRECT BURIAL TYPE

MSL WASHINGTON DECORATIVE BASE
#22”H x 17”W WASH/LAYTON CITY/HH/GL/BK
POLYURETHANE 1/2” MIN. THICKNESS

BASE DETAIL

FINISH:
BLACK

Layton
City

DRAWN BY
MTL

SCALE
NONE

DATE
5/11

REVISIONS
5/16

STANDARD
DRAWING
SL-02 RESIDENTIAL LIGHT
ST—LT—02
STANDARD RESIDENTIAL LIGHT FIXTURE – SL-02A
(WITH OPTIONAL CAGE ON FIXTURE)

HADCO FIXTURE:
#C6549C-40LED

MOUNTAIN STATES POLE #
16'0H/12' AC Rts/3-5.25/17"
WASH) NAME=HH=GL=BK
POLE: 12' ABOVE GRADE
(16' OVERALL)
SHAFT: TAPERED STEEL
MIN 8 EPA, DIRECT BURIAL TYPE

BASE DETAIL
FINISH: BLACK

MOUNTAIN STATES DECORATIVE
BASE 23" H x 17" W
WASH/LAYTON CITY/HH/GL/BK
POLYURETHANE 1/2" MIN.
THICKNESS GOLD TIPPED LOGO

PRE-CAST CONCRETE
MOW STRIP

COLD TAR EPOXY COATING
UNDERGROUND PORTION
OF POLE 4' MINIMUM

Courses: Layton City
TYPICAL RESIDENTIAL LIGHT FIXTURE - SL-02B
(WITH OPTIONAL CAGE AND FLUTED POLE)

HADCO FIXTURE:
#C6549C-40LED

MOUNTAIN STATES POLE #
16’OH/12’AG EFA/17”WASH)
NAME-HH-CL-BK
POLE: 12’ ABOVE GRADE
(16’ OVERALL)
SHAFT: FLUTED STEEL
MIN 10 EPA, DIRECT BURIAL TYPE

BASE DETAIL
FINISH: BLACK

MOUNTAIN STATES DECORATIVE
BASE 23” H x 17” W WASH/
LAYTON CITY/HH/CL/BK
POLYURETHANE 1/2” MIN.
THICKNESS GOLD TIPPED LOGO

PRE-CAST CONCRETE
MOW STRIP

WIREWAY HOLE
DOUBLE LIGHT FLUTED POLE —
SL-03
COMMERCIAL AND/OR RESIDENTIAL AS DESIGNATED BY THE CITY ENGINEER

TWIN ARM BRACKET: CAST ALUMINUM
2-LITE @ 180 W/ CENTER HUB TO ACCOMMODATE 4" POLE TENON W/ DUPLEX 120V RECEPTACLE

POLE BY MOUNTAIN STATES LIGHTING
PART# 14EFA-5/14S-TT/3x30D-FRANK(LOGO) —BLACK (PART # IS FOR POLE & DECORATIVE BASE) 14" FLUTED ALUMINUM .25" WALL THICKNESS PAINTED BLACK WITH FIRST 16" OF POLE AND BASE PLATE TO BE COATED WITH INDUSTRIAL COLD GALV MIN EPA OF 20 IN 80 MPH ZONE (1.3 GUST FACTOR)

DECORATIVE BASE BY MOUNTAIN STATES LIGHTING
PART# 17" FRANK(LOGO)—HDE9—BK (BASE ONLY) 40"H x 17"D HIGH DENSITY ELASTOMER DECORATIVE BASE, DENSITY OF 71 LBS PER CUBIC FOOT, PAINTED BLACK WITH A MODIFIED URETHANE COATING, LOGO TIPPED GOLD (STAYS FLEXIBLE OVER TIME W/MAX ADHESION)

SEE ST-LT-08 FOR REQUIRED CONCRETE BASE DETAIL

BASE DETAIL
FINISH: BLACK

ANCHOR BASE DETAIL
12" BOLT CIRCLE
ANCHOR BOLTS: 3/4" x 18"

STANDARD DRAWING
SL-03 DBL LIGHT FLUTED
ST-LT-05

DRAWN BY
MTL
SCALE
NONE
DATE
5/11
REVISIONS
1/12
SINGLE LIGHT FLUTED POLE AND FIXTURE SL-04

LUMILOCK LED SPECIFICATIONS:
- TYPE III ASYMMETRIC DISTRIBUTION.
- 4000K (CCT) 80 LUXEON REBEL ES LED'S ON ALUMINUM CORE PCB. SEALED ACRYLIC LENSES, IP66 RATED.
- MINIMUM 65 COLOR RENDERING INDEX (CRI).
- 120-277 VAC, 50-60Hz AUTO SENSING.
- 10KV/10KA SURGE SUPPRESSION BUILT IN.

TOP VIEW

80 LED MODULE:
TYPE III LUMILOCK,
IP66 RATED

DRIVER COVER:
DIE-CAST ALUMINUM,
TOOL-LESS ENTRY

GLOBE HOLDER:
DIE-CAST ALUMINUM

DRIVER ENCLOSURE:
DIE-CAST ALUMINUM,
TOOL-LESS ENTRY

ACCESS DOOR

SLIP FITTER:
3" I.D.

FASTENERS:
STAINLESS STEEL
HEX HEAD BOLTS

LUMILOCK LED ASSEMBLY

BASE DETAIL

ANCHOR BASE DETAIL
12" BOLT CIRCLE
ANCHOR BOLTS: 3/4" x 18"

14'-0"

8.5"

12"

40"

17"

MSL POLE:
#14EFA-5.0-3XJT
14' FLUTED ALUMINUM .25" WALL THICKNESS
PAINTED BLACK WITH FIRST 16"
OF POLE AND BASE PLATE TO BE
COATED WITH INDUSTRIAL COLD GALV
MIN EPA OF 20 IN 80 MPH ZONE
(1.3 GUST FACTOR)

MSL DECORATIVE BASE:
#FRANKLIN 40"x17"x12"

HIGH DENSITY ELASTOMER BASE
DENSITY OF 71 LBS PER CUBIC FT.
1/2" MIN. THICKNESS
PAINTED BLACK WITH A MODIFIED
URETHANE COATING. LOOED PAINTED GOLD

GALVANIZED ANCHOR PLATE
4" O.D. TRANSITION PIPE SLD
UP INSIDE ALUMINUM EXTRUSION
WITH A COMPRESSION FIT &
BOLTED TOGETHER.

SEE ST-LT-08 FOR REQUIRED
CONCRETE BASE DETAIL. ALL LIGHT
POLES INSTALLED WITHIN UDOT
RIGHT-OF-WAY "CLEAR ZONE"
(UDOT DD18) MUST HAVE A
BREAKAWAY BASE (UDOT SL11) AND
USE PRE-CAST POLYMER CONCRETE
JUNCTION BOXES
ARterial Street Light
Conduit and Power Layout

Notes:
1. all Street light cable shall be direct burial cable in conduit 1 1/2" minimum schedule 40 gray non-conductive PVC.
2. If trench repair is in a roadway or paved trail the repair will be as per Layton City excavation permit specification.
3. inground boxes located within 20' of approaches and intersections shall be carson h series h1324.

Detail—Commercial Branch Circuit Trench

Drawn by
Mtl
Scale
None
Date
5/11
Revisions
1/12

Layton City
Standard
Drawing
Arterial Street Light
ST-LT-07
ARTERIAL STREET LIGHTS
UNDERGROUND NOTES & DETAILS

NOTES:

1. CONTRACTORS SHALL FOLLOW LAYTON CITY INSTALLATION AND INSPECTION PROCEDURE FOR LIGHT POLES AND LIGHT FIXTURES BEFORE ACCEPTANCE.

2. STREET LIGHT POLES SHALL BE LOCATED AS INDICATED ON THE APPROVED LIGHTING SITE PLAN, AND INSTALLED AS DESCRIBED IN THE CITY STANDARDS.

3. EACH STREET LIGHT ASSEMBLY SHALL HAVE A JUNCTION BOX WITH COVER MARKED "STREET LIGHTING" WITH FUSES.

4. FUSE HOT WIRES IN JUNCTION BOXES; SUPPLY SPICE KIT FOR NEUTRAL WIRE.

5. INSTALL GRAY NON-CONDUCTIVE PVC 1 1/2" MIN. CONDUITS WITH 24" COVER AND SAND BEDDING.

6. CONTRACTOR TO INSTALL METER CABINET STRONG BOX WITH BREAKER PANEL BOX TO BE LOCATED MIN. 8" FROM UTILITY CO. TRANSFORMER OR SECONDARY BOX.

7. BALANCE LOADS ACROSS PHASES FOR 120 V RECEPTACLES.

8. VIBRATED 4000 PSI CONCRETE @ 28 DAYS (6.5 CIV MIX).

9. ANY DISTURBED MATERIAL WITHIN 8' OF POLE FOUNDATION SHALL BE COMPACTED TO 90% OR GREATER.

10. UNDISTURBED NATIVE GRAVEL—SANDY GRAVEL ASSUMED. IF DIFFERENT, CONTACT CITY ENGINEER.

11. USE A 30" DIA. SONO TUBE.

12. LIGHTING LAYOUT MUST BE SHOWN ON AS-BUILTS.

13. GROUND AND NEUTRAL SHALL BE SEPARATE.

14. IF DEPTH CANNOT BE MET, MASS MUST BE EQUIVALENT TO MASS AS SHOWN.

15. REBAR AND TRENCH MUST BE INSPECTED PRIOR TO CONCRETE POUR.

16. ALL SPECIFICATIONS FOR WIRE, CONDUIT, FUSE KITS, SPICE KITS, JUNCTION BOXES AND CONNECTORS MUST BE SUBMITTED TO THE CITY ENGINEER FOR APPROVAL PRIOR TO ANY WORK BEING PERFORMED.

17. ALL CONDUCTORS SHALL BE OKONITE-FLAR TYPE TC-CABLE #112-10-4054; OKONITE X-OLENE OKOSEAL #112-31-3747; OR ANIXTER VNTC #34-0603 COPPER ONLY

18. FUSE HOLDERS SHALL BE IN-LINE, WATER TIGHT LEC-AA FOR ARTERIAL POLES.

DRAWN BY
MTL:
STANDARD DRAWING
Layton City: ARTERIAL STR LIGHTS UNDER
ST—LT—09

SCALE:
NONE

DATE:
5/11

REVISIONS:
1/12

SCALE:
NONE

DATE: 5/11

REVISIONS:
1/12
SINGLE STREET LIGHT INSTALLATION

UNDISTURBED EARTH OR 60% COMPACTION AROUND CONCRETE BASE

STANDARD LAYTON CITY POLE

ELASTOMER TWO PIECE BASE COVER

MULTI-PONY CONNECTIONS
RAM 350 SERIES
HOT LEG
NEUTRAL
GROUND WIRES
CARSON L 1419-12 BOX
RAB 350 SERIES CONNECTOR
GROUND ROD 5/8" x 8"

A DETAIL-SPICE BOX
SCALE NO SCALE

(4) #4 BARS WITH
(5) #4 TIES

GALVANIZED ANCHOR
BOLTS 3/4" x 18"

B DETAIL-JUNCTION BOX WITH FUSES
SCALE NO SCALE

FROM ROCKY MTN POWER
(SEE ROCKY MTN POWER DETAIL)

CONCRETE BASE

24" Ø

1 1/2" MIN. SCHEDULE
40 PVC CONDUIT

SCHEDULE 40 OR IMC RIGID ELBOW

30" MIN.

DIRECT BURIAL CABLE IN CONDUIT

12" MIN.

MAGNETIC MARKER TAPE
SAND
WATER LINE
BACKFILL

D DETAIL-POLE SPACING FROM FACE OF CURB
SCALE NO SCALE
Figure 63—Street Lighting Points of Connection Diagram

More information on streetlights is posted online at: www.pacificpower.net/ed/streetlights/im.html and www.rockymountainpower.net/ed/streetlights/im.html.