Location:       Project Number:

Light Source Type:       IES Light Distribution Type:

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Service Cost per Year for Luminaire Replacement or Partial Modernization

= Annual Energy Cost + Annual Maintenance Cost + (Installation Cost/Warranty Period)

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Annual Energy Cost

= [(No. of Luminaires x Wattage per Luminaire x Operational Hours)÷1000] x Unit Cost of Electricity

 No. of Roadway Luminaires =       (1)

 Roadway Luminaire Wattage =       (2)

 No. of High Mast Luminaires =       (3)

 High Mast Luminaire Wattage =       (4)

Operational Hours = 4380

 Unit Cost of Electricity =       (5) ($0.10 per kWh or location specific rate)

Annual Energy Cost =

[{(      x      ) + (      x       )} x 4380 ÷ 1000] x       =

 (1) (2) (3) (4) (5) (A)

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Annual Maintenance Cost

= No. of Luminaires x Maintenance Cost per Luminaire

No. of Roadway Luminaires =       (1)

Maintenance Cost per Roadway Luminaire,

for 250W or 400W HPS = $60 (6)

for other light source types =       (7) (per manufacturer’s info)

No. of High Mast Luminaires =       (3)

Maintenance Cost per High Mast Luminaire,

for 1000W = $105 (8)

for other light source types =       (9) (per manufacturer’s info)

Annual Maintenance Cost = {(      x      ) + (      x      )} =

 (1) (6) or (7) (3) (8) or (9) (B)

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Installation Costs

= No. of Luminaires x Furnish & Install Cost per Luminaire

No. of Roadway Luminaires =       (1)

Furnish/Install Cost per Roadway Luminaire =       (10) (for HPS use bid history)

Service Life = years (11)

No. of High Mast Luminaires =       (3)

Furnish/Install Cost per High Mast Luminaire =       (12) (for HPS use bid history)

 Service Life=  years (13)

Installation Cost = [(      x       ÷      ) + (      x       ÷      )/=

 (1) (10) (11) (3) (12) (13) (C)

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Service Cost per Year =       +       +       =

 (A) (B) (C)