# AMENDMENT #1

# TO THE INTERLOCAL TRAFFIC SIGNAL MAINTENANCE AGREEMENT

# BETWEEN CITY OF RENO AND WASHOE COUNTY

This AMENDMENT #1 revises the ORIGINAL approved maintenance services agreement effective July 1, 2020, between the County of Washoe, a political subdivision of the State of Nevada (COUNTY) and the City of Reno (CITY) as follows:

1. Extend the Agreement termination date from July 1, 2025, to July 1, 2030, with the option to further extend the Agreement termination date to July 1, 2035, when requested in writing by either party.

2. Increase the "not to exceed" contract value from $70,000.00 per contract year, to $130,000.00 per contract year.

3. Add a new Section 4 to the Agreement, whereas the CITY agrees:

   4. To provide separate invoices to the COUNTY for all equipment and services related to the EMERGENCY REPAIR WORK. EMERGENCY REPAIR WORK, includes but is not limited to, cabinet and equipment replacement, pole replacement, mast arm replacement. This expense is not included in the annual not to exceed amount.

4. Remove and replace Exhibit B, Washoe County Traffic Signals 11-06-2020, with Exhibit B-1, Washoe County Traffic Signals, as attached. As new signalization facilities are built and dedicated, Exhibit B-1 will be updated, reviewed by the County Engineer, and provided to the City of Reno for inclusion in the Interlocal Traffic Signal Maintenance Agreement.

5. Remove and replace Exhibit C, Fee Schedule for FY 2020-2021, with Exhibit C-1, Fee Schedule for FY 2026, as attached.

6. Remove and replace Exhibit D, Activity Guideline Maintenance Management System, with Exhibit D-1, Activity Guidelines for Traffic Signal Maintenance Services.

AFFIRMATION OF NO OTHER AGREEMENT OR AMENDMENT, the Parties affirm all other terms and provisions of the ORIGINAL Agreement that are not specifically modified by AMENDMENT #1, shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, the Parties hereto by signature have caused this AMENDMENT #1 to be duly executed and effective as of the date defined above.

SIGNATURES

CITY OF RENO

By: _____

Title: _____

Date: _____

WASHOE COUNTY

By: _____

Title: Chair, Washoe County Commission

Date: _____

# Exhibit B-1

Washoe County Traffic Signals

Location

1. Arrowcreek Pkwy /Zolezzi Lane
2. Mt. Rose Hwy/Galena Fire Station
3. Mt. Rose Hwy/Thomas Creek Rd
4. Mt Rose Hwy/Wedge Pkwy
5. Pyramid Blvd/Eagle Canyon Dr
6. Pyramid/Blvd/Golden View
7. S.R. 28/Country Club Dr
8. S.R. 28/Crystal Bay
9. S.R. 28/Northwood Blvd/Southwood Blvd
10. S.R. 28/Village Blvd
11. Sun Valley Blvd/1st Ave
12. Sun Valley Blvd/2ndt Ave
13. Sun Valley Blvd/4thAve
14. Sun Valley Blvd/5th Ave
15. Sun Valley Blvd/7thAve
16. Sun Valley Blvd/Dandini Blvd
17. Wedge Pkwy/Golden Gate Dr.
18. Pyramid Blvd/W. Calle de la Plata
19. Sun Valley Blvd./Highland Ranch Pkwy
20. Arrowcreek Pkwy/Thomas Creek Dr.
21. El Rancho Dr./Moorpark Ct.
22. Silent Sparrow Dr./W. Calle de la Plata
23. Pyramid and Egyptian/Sunset Springs
24. Pyramid and Kings River

# Exhibit C-1

Fee Schedule for FY 2026

*The charged rate shall be calculated using a 2.1 multiplier and the current wage rate. As of July 1, 2025 the charged rates are as shown below.*

| | |
|---|---|
| Regular time hourly rate for Traffic Signal Maintenance Worker | $ 73.18 |
| Overtime hourly rate for Traffic Signal Maintenance Worker | $ 109.78 |
| Regular time hourly rate for Traffic Signal Maintenance Mechanic | $ 93.55 |
| Overtime hourly rate for Traffic Signal Maintenance Mechanic | $ 140.32 |
| Regular time hourly rate for Traffic Signal Maintenance Technician | $ 99.61 |
| Overtime hourly rate for Traffic Signal Maintenance Technician | $ 149.42 |
| Regular time hourly rate for Traffic Signal Maintenance Supervisor | $ 125.13 |
| Overtime hourly rate for Traffic Signal Maintenance Supervisor | $ 187.70 |
| Regular time hourly rate for Associate Civil Engineer | $ 135.00 |
| Overtime hourly rate for Associate Civil Engineer | $ 202.50 |
| Regular time hourly rate for Senior Civil Engineer | $ 164.07 |
| Overtime hourly rate for Senior Civil Engineer | $ 246.11 |
| Regular time hourly rate for Traffic Engineer | $ 171.38 |

Equipment charged per Federal Emergency Management Agency's (FEMA) Current Schedule of Equipment Rates.

Supplies and materials will be charged at cost.

# Exhibit D-1

Activity Guidelines for Traffic Signal Maintenance Services

**City of Reno Traffic Signal Maintenance Activity Guideline**

**Work Activity** PM – Traffic Signals
**Code** 201

**Description of Work**

Inspection and repair of overhead traffic signals following a preventative maintenance checklist. Work may include repair or replacement of damaged or defective signal head components, cleaning of all signal indications and camera lenses, touch-up painting of signal heads, inspection of poles, mast arms and associated hardware and re-lamping signal heads as necessary.

**Planning Criteria**

Performed annually – following checklist. May be affected by weather.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>1. Perform visual inspection. Record findings.<br>2. Set up work zones, signs, and cones.<br>3. Carry out maintenance and repair per checklist.<br>4. Clean up and vacate site.<br><br>End of Shift<br>5. Document work and signal guideline checklist. | 1. Observe traffic flow<br>2. Appropriate personal protective equipment (PPE)<br>3. Follow current NV Work Zone Traffic Control Handbook and MUTCD<br>4. Move work zone signs/cones<br>5. Complete records |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Signal Lamp LED | 1 EA | | |
| Backplate | 1 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** PM – Cabinet
**Code** 202

**Description of Work**
Preventative maintenance for traffic signal cabinet. This includes cleaning of the cabinet and its components, checking operation of signal and its components, and making repair as necessary. A detailed checklist is followed to allow all components to be properly inspected and maintained.

**Planning Criteria**
Performed annually – following checklist and includes one operational observation check to be conducted with at least four months between PM and operational check. May be affected by weather.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Perform visual inspection. Record findings per checklist.<br>4. Set up work zones.<br>5. Carry out maintenance and repair per checklist.<br>6. Clean up and vacate site.<br><br>End of Shift<br>7. Document work and signal guideline checklist. | 1. Observe traffic flow<br>2. Appropriate personal protective equipment (PPE)<br>3. Follow current NV Work Zone Traffic Control Handbook and MUTCD<br>4. Move work zone signs/cones<br>5. Complete records |
| Traffic Signal Technician | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Rags | 2 PO | | |
| Cleaning Materials | 1 CA | | |
| Air Filter | 1 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Safety/Conflict Monitors
**Code** 203

**Description of Work**
Remove existing malfunction management unit from cabinet, exchange with a tested unit. Return the removed unit to the signal shop test bench and verify correct operation on test equipment. Download and document test results. Accomplishments include both the test and the replacement.

**Planning Criteria**
ITMS and ITE guidelines require MMUs be tested and results documented at least once a year.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure | 1. Observe traffic flow |
| Traffic Signal Technician | 1 | 1. Ready equipment and materials.<br>2. Perform CDL inspection as required. | 2. Appropriate personal protective equipment (PPE) |
| ***Equipment*** | ***Quantity*** | | |
| Truck | 1 | At Work Site<br>3. Place signal on flash.<br>4. Remove existing unit.<br>5. Exchange program card.<br>6. Ensure copy of test inserted on document pocket.<br>7. Return to operation, observe correct operation.<br>8. Set time in monitor and verify correct program card.<br>9. Clear existing fault log. | |
| ***Materials*** | ***Quantity*** | | |
| Conflict Monitor | 1 EA | | |
| Conflict Monitor MMU | 1 EA | | |
| | | End of Shift<br>10. Document work. | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** School Flasher Maintenance
**Code** 205

**Description of Work**
AII work associated with the timing of school flasher signals as supplied on the list provided by the Washoe County School District. Setting operation days and times, programming school holidays and other days off, changing clock batteries, checking signal alignment and testing operation to ensure proper timing of signals and control of vehicle speed in school zones.

**Planning Criteria**
Performed once a year prior to school terms, or as required due to schedule changes or signal malfunctions.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Remove battery – kill power.<br>4. Install new battery.<br>5. Reset clock and programs.<br>6. Set current time, day, month, and year.<br>7. Set on/off holiday schedule.<br>8. Review program.<br>9. Test override.<br>10. Set to normal.<br>11. Cleaning, bulb change (if necessary).<br><br>End of Shift<br>12. Document work. | 1. Produce schedule list for the different zones<br>2. Check for available AC power<br>3. Check fuse<br>4. Observe traffic flow<br>5. Appropriate personal protective equipment (PPE)<br>6. Check operation of flashers |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Truck, Pickup or Bucket | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| 9V Batteries | 7 EA | | |
| Rags | 1 PO | | |
| Window Cleaner | 0.1 Gal | | |
| Signal Lamp LED | 1 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Interconnect Cable
**Code** 206

**Description of Work**
All work associated with maintaining communications on City owned interconnect cables between Corp Yard traffic signal control computer and associated traffic signals. Includes testing, diagnosis, replacement of cable and verifying operation of wireless communication.

**Planning Criteria**
Communications problems are reported and logged by the computer system. The City has 3 types of cables, 25 pair, 18 pair, and 12 pair branching throughout the City.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Determine shop/field fault.<br>3. Signal/no signal/hum.<br>4. Connect signal generator to line.<br>5. Perform CDL inspection as required.<br><br>At Work Site<br>6. Track signal along route.<br>7. Check signal at destination.<br>8. Trace line back to source. Break as required to determine fault direction.<br>9. Find fault.<br>10. Repair as required – resplice/replace cable and/or find spot where contractor dug up and change pair.<br><br>End of Shift<br>11. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Copy of interconnect cable wire plan<br>4. Load test equipment and materials<br>5. Hook up shop test equipment<br>6. Determine that the repair/replacement is complete through a complete and clear signal<br>7. Return to shop<br>8. Put intersections back online<br>9. Complete records |
| Traffic Signal Technician | 2 | | |
| ***Equipment*** | ***Quantity*** | | |
| Truck, Bucket | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Cable | 25 FT | | |

**City of Reno Traffic Signal Maintenance Activity Guideline**

**Work Activity** Fiber Optics
**Code** 207

**Description of Work**
All work associated with the installation, maintenance, and repair of fiber optic cables utilized for traffic signal operations. Includes testing, diagnosis, replacement of cables and verifying operation of communications.

**Planning Criteria**
Communications problems are reported and logged by the computer system.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Determine shop/field fault.<br>3. Signal/no signal/hum.<br>4. Connect signal generator to line.<br>5. Perform CDL inspection as required.<br><br>At Work Site<br>6. Track signal along route.<br>7. Check signal at destination.<br>8. Trace line back to source. Break as required to determine fault direction.<br>9. Find fault.<br>10. Repair as required – resplice/replace cable and/or find spot where contractor dug up and change pair.<br><br>End of Shift<br>11. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Copy of interconnect cable wire plan<br>4. Load test equipment and materials<br>5. Hook up shop test equipment<br>6. Determine that the repair/replacement is complete through a complete and clear signal<br>7. Return to shop<br>8. Put intersections back online<br>9. Complete records |
| Traffic Signal Technician | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Truck | 1 | | |
| Fiber Trailer | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Fiber Optic Cable | 1,000 FT | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Advanced Traffic Management System (ATMS) Maintenance
**Code** 208

**Description of Work**
Enter or modify system parameters as directed by traffic engineering. Check daily for system problems and traffic signal malfunctions reported by the system. Monitor system for proper operation. Generate monthly operation log report. Generate system reports as required. Reload system software when required, backup system parameters monthly. Troubleshoot system failures. Check ITMS.

**Planning Criteria**
The work is performed routinely on a daily basis.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | 1. Check system operation by access monitor or keyboard.<br>2. Check system alarms and print records.<br>3. Enter timing and data for signals with monitor or keyboard.<br>4. Backup system as required.<br>5. Change out system components as required.<br>6. Consult system manuals and repair, exchange, or send for repair the failed components. | 1. Check help files<br>2. Monitor system reports and displays<br>3. Monitor system alarms<br>4. Communicate with engineering |
| Traffic Signal Technician | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| n/a | | | |
| ***Materials*** | ***Quantity*** | | |
| n/a | | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Signal Response
**Code** 230

**Description of Work**
AII unscheduled work performed in response to service requests — not preventative maintenance. Work may include but is not limited to maintenance or repair of signals, cabinet and controller malfunctions, signal on flash, accident damage, loose heads or backplates, school flasher malfunctions.

**Planning Criteria**
Performed as required in response to service requests or on-call.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure | 1. If unsure of the problem, bring additional materials |
| Traffic Signal Mechanic | 1 | 1. Gather as much information as possible to pre-diagnose problem. | 2. If going to multiple sites, plan route to avoid backtracking |
| Traffic Signal Technician | 1 | 2. Ready equipment and materials. | 3. Appropriate personal protective equipment (PPE) |
| | | 3. Perform CDL inspection as required. | 4. Observe traffic flow |
| ***Equipment*** | ***Quantity*** | 4. Pick up any additional materials that might be needed | 5. Follow current NV Work Zone Traffic Control Handbook and MUTCD |
| Bucket Truck | 1 | 5. Travel to work site. | 6. Move work zone signs/cones |
| ***Materials*** | ***Quantity*** | At Work Site | 7. Do not proceed if work cannot be done safely |
| Signal Heads | 1 EA | 6. Park vehicles in a safe manner. | 8. Coordinate with utility companies if needed |
| Controller | 1 EA | 7. Set up work zones, signs, and cones. | 9. Complete records |
| Signal Lamp LED | 1 EA | 8. Perform visual inspection. Record findings. | |
| Signal Lamp 3M | 1 EA | 9. Are more personnel needed? Notify supervisor. | |
| | | 10. Correct problem. | |
| | | 11. Carry out maintenance and repair per checklist. | |
| | | 12. Clean up and vacate site. | |
| | | End of Shift | |
| | | 13. Document work and signal guideline checklist. | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Pedestrian Signal Repair
**Code** 240

**Description of Work**
All work required to maintain, repair, modify, and/or replace malfunctioning pedestrian signals, indications and buttons to ensure that pedestrian movement is safely controlled and coordinated.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure | 1. Traffic controls |
| Traffic Signal Mechanic | 1 | 1. Ready equipment and materials.<br>2. Perform CDL inspection as required. | 2. Appropriate personal protective equipment (PPE)<br>3. Check for voltage<br>4. Check buttons<br>5. Check fuses and wiring<br>6. Check signal components |
| ***Equipment*** | ***Quantity*** | At Work Site | |
| Truck, Pickup or Bucket | 1 | 3. Determine which head has the problem.<br>4. Replace or repair module, install conversion kit or repair button.<br>5. Check sign plates, egg crates, visors, and alignment.<br>6. Check operation. | |
| ***Materials*** | ***Quantity*** | End of Shift | |
| Module | 1 EA | 7. Document work. | |
| PED Button | 1 EA | | |
| PED Directional Signal | 1 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Bench Repair
**Code** 241

**Description of Work**
AII work required to troubleshoot and repair faulty electronic traffic signal components, such as signal controllers, safety monitors, Opticom detectors, vehicle detectors, modems, power supplies, and other related components. Also includes equipment testing, new hardware evaluation, and repairs.

**Planning Criteria**
Performed as required.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | AT BENCH | 1. ID tag<br>2. Manufacturer's manuals and/or schematics<br>3. Determine if it is operating correctly<br>4. Check status under temperature extremes<br>5. Sign off<br>6. Return to stock |
| Traffic Signal Technician | 1 | 1. Determine problem/trouble type.<br>2. Troubleshoot.<br>3. Make repairs<br>4. Run equipment for extended period.<br>5. Sign off/log in computer, if applicable.<br>6. Return warranty items for repair.<br>7. Document work. | |
| ***Equipment*** | ***Quantity*** | | |
| n/a | | | |
| ***Materials*** | ***Quantity*** | | |
| n/a | | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Loop/Detection System Maintenance
**Code** 242

**Description of Work**
All work required to diagnose, maintain, and/or repair traffic detector loop malfunctions. Activity is performed to ensure proper detection loop operation and safely control traffic movement at intersections.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Determine if there is a detector problem.<br>4. Test amplifier, controller cabinet, then check for field problem<br>5. Remove loop lead and test.<br>6. Test loop lead in.<br>7. Check splices.<br>8. Re-hook good loops and adjust timing.<br>9. Reset Amp.<br><br>End of Shift<br>10. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Check connections<br>4. Check ground or open<br>5. Check street condition for signs of damage or failure<br>6. Observe operation |
| Traffic Signal Mechanic | 2 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Amplifier | 1 EA | | |
| Cable | 4 EA | | |
| Lug Nuts | 10 EA | | |
| Sealing Packs | 2 EA | | |
| Wire Nuts | 5 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Video Microwave Detectors
**Code** 243

**Description of Work**
AII work required to diagnose, maintain, and/or repair video/microwave detectors. Activity is performed to ensure safe operation and safe control of traffic movement at intersections.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Connect laptop as required.<br>4. Connect video monitor as required.<br>5. Analyze problem and observe operation.<br>6. Check programming.<br>7. Change as needed.<br><br>End of Shift<br>8. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Check connections<br>4. Observe operation |
| Traffic Signal Mechanic | 2 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Loop Wire | 500 FT | | |
| Sealant (Loops) | 24 PO | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** LED Replacement
**Code** 245

**Description of Work**
AII work required to replace LEDs.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure | 1. Traffic controls |
| Traffic Signal Mechanic | 1 | 1. Ready equipment and materials.<br>2. Perform CDL inspection as required. | 2. Appropriate personal protective equipment (PPE)<br>3. Check head alignment and tightness<br>4. Check backplate for looseness<br>5. Observe operation |
| ***Equipment*** | ***Quantity*** | At Work Site | |
| Bucket Truck | 1 | 3. Replace LED. | |
| ***Materials*** | ***Quantity*** | End of Shift | |
| Signal Lamp LED | 5 EA | 4. Document work. | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Signal Lamp Replacement
**Code** 246

**Description of Work**
Work includes the replacement every two years of traffic signal head bulbs and cleaning signal reflectors and lenses at traffic signal intersections to ensure that signal bulbs are replaced prior to burnout or in response to service requests.

**Planning Criteria**
Performed once every two years as preventative maintenance or as required in response to service requests.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Clean and adjust lens, reflector, and dust visor.<br>4. Replace bulb.<br>5. Perform occasional PM and walkaround.<br><br>End of Shift<br>6. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Check head alignment and tightness<br>4. Check for cracked lens or reflector<br>5. Check backplate for looseness<br>6. Observe operation |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Signal Bulbs | 1 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Signal Head Repair
**Code** 247

**Description of Work**
All work required to change lenses, visors, back plates, sockets, internal wires, alignment, and frame to ensure proper operation of traffic signal.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure | 1. Traffic controls |
| Traffic Signal Mechanic | 1 | 1. Ready equipment and materials.<br>2. Perform CDL inspection as required. | 2. Appropriate personal protective equipment (PPE)<br>3. Check head alignment and tightness<br>4. Check for cracked lens or reflector<br>5. Check backplate for looseness<br>6. Observe operation |
| ***Equipment*** | ***Quantity*** | At Work Site | |
| Bucket Truck | 1 | 3. Clean and adjust lens, reflector, and dust visor.<br>4. Perform additional repairs as needed. | |
| ***Materials*** | ***Quantity*** | End of Shift | |
| Signal Head | 1 EA | 5. Document work. | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Street Light Maintenance
**Code** 250

**Description of Work**
AII work required to maintain and/or repair non-functioning city owned streetlights normally located at intersections and overpasses. Work may include replacement of bulb, glass, ballast or entire street light fixture as needed. Activity is performed to ensure adequate roadway illumination. Also includes street light service maintenance and electrical panel maintenance.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Set up work zone.<br>4. Cover photocell or turn on override switch.<br>5. Replace bulb.<br>6. Clean lens and glass.<br>7. Uncover photocell or turn off override.<br><br>End of Shift<br>8. Document work. | 1. Verify that lights are City owned<br>2. Traffic controls<br>3. Appropriate personal protective equipment (PPE)<br>4. Check voltage if there is no light<br>5. Check starter if High Pressure Sodium bulb<br>6. Check ballast<br>7. Observe operation |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Photocells | 2 EA | | |
| Signal Lamp LED | 1 EA | | |
| Glass Lens | 1 EA | | |
| Wire | 30 FT | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Illuminated Street Name Sign Maintenance
**Code** 252

**Description of Work**
Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels, and checking sign mounting hardware. This effort ensures proper direction to motorists and pedestrians.

**Planning Criteria**
Performed as required in response to service requests and/or as needed.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Set up work zone.<br>4. Turn on override or cover photocell.<br>5. Replace bulb.<br>6. Check panel thumb screws.<br>7. Check mounting and hardware<br>8. Uncover photocell or turn off override.<br><br>End of Shift<br>9. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Check incoming voltage<br>4. Check fuses<br>5. Troubleshoot sockets and ballasts<br>6. Repair or replace as needed<br>7. Observe operation |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| SL Ballast | 1 EA | | |
| Signal Lamp LED | 1 EA | | |
| Fuses | 4 EA | | |

## City of Reno Traffic Signal Maintenance Activity Guideline

**Work Activity** Illuminated Street Name Sign Installation
**Code** 253

**Description of Work**
Maintenance and repair of illuminated street signs. Work may include replacement of bulbs, ballasts, fuses, wiring, missing or damaged name panels, and checking sign mounting hardware. This effort ensures proper direction to motorists and pedestrians.

**Planning Criteria**
Performed as required in response to service requests and/or as needed. Signs captured under this activity code also includes signs such as One Way Arrows and No Left Turn signs.

| Resource Requirements | | Work Method | Check Points |
|---|---|---|---|
| ***Personnel*** | ***Quantity*** | Pre-Departure<br>1. Ready equipment and materials.<br>2. Perform CDL inspection as required.<br><br>At Work Site<br>3. Set up work zone.<br>4. Turn on override or cover photocell.<br>5. Replace bulbs.<br>6. Check panel thumb screws.<br>7. Check mounting and hardware<br>8. Uncover photocell or turn off override.<br><br>End of Shift<br>9. Document work. | 1. Traffic controls<br>2. Appropriate personal protective equipment (PPE)<br>3. Check incoming voltage<br>4. Check fuses<br>5. Troubleshoot sockets and ballasts<br>6. Repair or replace as needed<br>7. Observe operation |
| Traffic Signal Mechanic | 1 | | |
| ***Equipment*** | ***Quantity*** | | |
| Bucket Truck | 1 | | |
| ***Materials*** | ***Quantity*** | | |
| Ballast | 4 EA | | |
| Signal Lamp LED | 4 EA | | |
| Photocells | 2 EA | | |