### VOLUME II - YEAR 2003 REVISIONS

<table>
<thead>
<tr>
<th>DRAWING NUMBER AND TITLE</th>
<th>SHEET NUMBER(S)</th>
<th>NATURE OF CHANGE</th>
<th>EFFECTIVE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>404.132 “P30” Pull box</td>
<td>1</td>
<td>New Drawing. Pull box drawing added for communications infrastructure.</td>
<td>6/1/03</td>
</tr>
<tr>
<td>404.133 “P200” Pull box</td>
<td>1</td>
<td>New Drawing. Pull box drawing added for communications infrastructure.</td>
<td>“</td>
</tr>
<tr>
<td>404.1306 Typical Traffic Signal Underground Layout with Interim Street Lighting and Service Pedestal (Center of Curve Radius)</td>
<td>1</td>
<td>Revisions to accommodate communications infrastructure.</td>
<td>“</td>
</tr>
<tr>
<td>404.1306 Typical Traffic Signal Underground Layout with Interim Street Lighting and Service Pedestal (End of Curve Radius)</td>
<td>2</td>
<td>Revisions to accommodate communications infrastructure.</td>
<td>“</td>
</tr>
<tr>
<td>404.1300 Pole Location and Signal Mounting at Intersection (Two Pole) Curbside Sidewalk</td>
<td>1</td>
<td>Revisions to existing drawings to incorporate pedestrian and bicycle improvements resulting from the Alternative Modes Needs Assessment for the Las Vegas Valley.</td>
<td>8/1/03</td>
</tr>
<tr>
<td>404.1300 Pole Location and Signal Mounting at Intersection (Single Pole) Curbside Sidewalk</td>
<td>2</td>
<td>“</td>
<td>“</td>
</tr>
<tr>
<td>DRAWING NUMBER AND TITLE</td>
<td>SHEET NUMBER(S)</td>
<td>NATURE OF CHANGE</td>
<td>EFFECTIVE DATE</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>404.1300ALT Pole Location and Signal Mounting at Intersection (Two Pole) Offset Sidewalk</td>
<td>1</td>
<td>New drawings to incorporate pedestrian and bicycle improvements resulting from the Alternative Modes Needs Assessment for the Las Vegas Valley.</td>
<td>8/1/03</td>
</tr>
<tr>
<td>404.1300ALT Pole Location and Signal Mounting at Intersection (Single Pole) Offset Sidewalk</td>
<td>2</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Revised February 2004
FOREWORD

UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS' CONSTRUCTION,
OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA
VOLUME II

The Uniform Standard Drawings for Public Works Construction may be revised by issuance of revisions or supplements to correct errors and omissions found in these drawings and to reflect advanced thinking and the changing technology of the construction industry. Each revision will supersede any previous pertinent drawing. Upon approval by the Regional Transportation Commission, revisions will be posted to the RTC website, www.rtsouthernnevada.com, on the first day of the month following the meeting. This volume contains all revisions through December 2003.

To implement this end a Specifications Committee has been established as a permanent organization to continually study and recommend changes to the standard drawings. Interested parties may address suggested changes and questions to the Regional Transportation Commission, 600 South Grand Central Parkway, Suite 350, Las Vegas, Nevada, 89106-4512.
## UNIFORM STANDARD DRAWINGS, CLARK COUNTY AREA

### TABLE OF CONTENTS

#### VOLUME II

**TRAFFIC SIGNALS**

### DRAWING NUMBER

#### SYMBOLS

<table>
<thead>
<tr>
<th>Drawing Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>404.001</td>
<td>Standard Symbols for Traffic Signal Drawings (2 sheets)</td>
</tr>
<tr>
<td>404.002</td>
<td>Quadrant Detail</td>
</tr>
</tbody>
</table>

#### PULL BOXES

<table>
<thead>
<tr>
<th>Drawing Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>404.110</td>
<td>No. 3 1/2 Pull Box</td>
</tr>
<tr>
<td>404.120</td>
<td>No. 5 Pull Box</td>
</tr>
<tr>
<td>404.121</td>
<td>Reinforced Plastic Mortar Service Box Assembly #5</td>
</tr>
<tr>
<td>404.130</td>
<td>No. 7 Pull Box</td>
</tr>
<tr>
<td>404.131</td>
<td>Reinforced Plastic Mortar Service Box Assembly #7</td>
</tr>
<tr>
<td>404.139</td>
<td>Steel Pull Boxes</td>
</tr>
<tr>
<td>404.140(SH1)</td>
<td>Pull Box Street Cover</td>
</tr>
<tr>
<td>404.140(SH2)</td>
<td>Pull Box Cover Bonding Detail</td>
</tr>
<tr>
<td>404.141</td>
<td>Pull Box Foundation</td>
</tr>
</tbody>
</table>

#### FOUNDATIONS

<table>
<thead>
<tr>
<th>Drawing Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>404.201</td>
<td>Type &quot;A&quot; Foundation</td>
</tr>
<tr>
<td>404.202</td>
<td>Type &quot;B&quot; Foundation</td>
</tr>
<tr>
<td>404.203</td>
<td>Type &quot;C&quot; Foundation</td>
</tr>
<tr>
<td>404.204</td>
<td>DELETED</td>
</tr>
<tr>
<td>404.205</td>
<td>Type &quot;E&quot; Foundation</td>
</tr>
<tr>
<td>404.206</td>
<td>Type &quot;F&quot; Foundation</td>
</tr>
<tr>
<td>404.207</td>
<td>Type &quot;G&quot; Foundation</td>
</tr>
<tr>
<td>404.208</td>
<td>Type &quot;H&quot; Foundation</td>
</tr>
<tr>
<td>404.209</td>
<td>Type &quot;L&quot; Foundation</td>
</tr>
<tr>
<td>404.210</td>
<td>Type &quot;M&quot; Foundation</td>
</tr>
<tr>
<td>404.211</td>
<td>Type &quot;T&quot; Foundation</td>
</tr>
<tr>
<td>404.213</td>
<td>Type &quot;J&quot; and &quot;K&quot; Foundation</td>
</tr>
<tr>
<td>404.214</td>
<td>Service Pedestal Foundation</td>
</tr>
</tbody>
</table>
VOLUME II
TRAFFIC SIGNALS
CONTINUED

DRAWING NUMBER

CABINET

404.304 Type V Cabinet
404.305 Type VI Cabinet
404.307 Type VIII Cabinet
404.308 Type IX Cabinet
404.309 Flashing Beacon Controller Cabinet
404.310 Wiring Diagram for Flashing Beacon Timer Controlled Operation

PRIORITY VEHICLE PREEMPTION SYSTEM

404.320 DELETED - See Uniform Standard Specifications
           Subsection 623T.02.12

POLES AND POSTS

404.400(SH1) School Flashing Sign on Pole with Luminaire
404.400(SH2) School Flashing Sign on Type-III Pole
404.401(SH1) Pedestrian Push Button Post for Special Sign (8'-6")
404.401(SH2) Pedestrian Push Button Post for 2-½" Post Top Mounting
404.402 Signal Standard Type 1-A, 1-B
404.403 Sign Post with School Sign Mounted (2 sheets)
404.404 DELETED
404.405 Pedestal for Controller Cabinets
404.406 Type XX & XX-A -- 30' Signal and Luminaire Pole (6 sheets)
404.407(SH1) Type XX -- 20' Signal Pole (45' or Less Mast Arms)
404.407(SH2) Type XXA -- 20'-0" (50' through 60' Mast Arms)
1           Signal Pole
404.408 DELETED
404.409(SH1) Base Adaptor Plate for Type "H" Foundation
404.409(SH2) Base Adaptor Plate for Type "L" Foundation
404.410 30' Luminaire with School Flashing Sign
404.411 School Sign Mounted on a Traffic Signal Standard
404.412 School Sign Pole Type XX -- 30'
404.413 School Sign Pole Type XX -- 20'
404.414 Streetlighting Pole with Illuminated Street Name Sign
VOLUME II
TRAFFIC SIGNALS
CONTINUED

DRAWING NUMBER

POLES AND POSTS (CON'T)

404.415   Type III Pole with Illuminated Street Name Sign
404.416   Type XX Pole with Illuminated Street Name Sign
404.417   Street Name Sign Internally Illuminated
404.418   Sign Mounting Illustration
404.420   Block Number Sign

MAST ARMS AND ASSEMBLIES

404.500   DELETED
404.501   DELETED
404.502   One Bolt Simplex Arm Attachment Clamp Assembly
404.503   Retrofit Streetlight Mast Arm

DRILLING DETAILS

404.600   Pole Drilling Details
404.601   Island Signal Pole Details for 10' Pole

ISLAND EQUIPMENT

404.700   Island Signal Location

DETECTORS

404.800   DELETED - See Uniform Standard Specifications Subsection 623T.02.04
404.801   DELETED - See Uniform Standard Specifications Subsection 623T.02.04
404.810   Sawcut Details for Induction Loops
404.811   Details at Loop Pull Box
404.820   1 Induction Loop for 1 Travel Lane
404.821(SH1)  1 Induction Loop for 2 Travel Lanes
404.821(SH2)  2 Induction Loops for 2 Travel Lanes
404.822(SH1)  1 Induction Loop for 3 Travel Lanes
404.822(SH2)  3 Induction Loops for 3 Travel Lanes
VOLUME II
TRAFFIC SIGNALS
CONTINUED

DRAWING NUMBER

DETECTORS (CON'T)

404.823(SH1)  1 Induction Loop for 4 Travel Lanes
404.823(SH2)  4 Induction Loops for 4 Travel Lanes
404.825       3 Induction Loops for 3 Travel Lanes
404.826       Multiple Loop System for Thru Lane
404.827       Multiple Loop System for Left Turn Pocket
404.828       Type "Quadrapole" Loop Installation
404.829       Wire Diagrams for Multiple Loop Systems for Left Turn Pocket and Thru Lane
404.830       Circular Induction Loops for Travel Lanes
404.831       Pedestrian Push Button Detectors

BACK PLATES

404.900       Louvered Backplate for Mast Arm Mounted Signal
404.901       Louvered Backplate for Pole Mounted Signal
404.902       Louvered Backplate for 5 Section Signal Head
404.903       Louvered Backplate for 5 Section Signal Head

SIGNAL UNITS

404.1005      Bill of Materials - Signal Assemblies

SIGNAL ASSEMBLIES

404.1011      Types: A-1, A-2T, A-3
404.1012      Types: A-4T, A-5T
404.1013      Type: A-6T
404.1015      Types: A-8T, A-9T
404.1016      Types: A-10T, A-11T
404.1017      Types: A-12T, A-13T
404.1018      Types: A-14T, A-15T
404.1019      Type: A-16T
404.1020      Type: A-17T
VOLUME II
TRAFFIC SIGNALS
CONTINUED

DRAWING NUMBER

MAST ARM SIGNAL ASSEMBLIES

404.1022 Types: M-2A, M-3A
404.1023 Types: M-3, M-2

SIGNAL ASSEMBLIES

404.1024 Types: B-1T, B-2T, B-3T
404.1025 Types: B-5T, B-6T
404.1026 Types: B-7T, B-8T, B-9T
404.1027 Types: B-10, B-11T
404.1028 Types: B-12T, B-13T
404.1029 Type: B-14T
404.1030 Protective/Permissive M-5 Signal Heads
404.1031 Protective/Permissive M-5 Signal Heads, Assemblies and Part List
(3 sheets)
404.1032 Pedestrian Signal Assemblies W-0T, W-1, W-2T, W-3T, W-1T
404.1033 DELETED
404.1034 Pedestrian Push Button Sign Detail

VISORS AND LOUVERS

404.1100(SH1) Visors for 8" Signal
404.1100(SH2) Louvers and Visors for 12" Signal
404.1100(SH3) Geometrically Programmed Louver
404.1101 Backplate and Signal Head Assembly

SIGNAL HARDWARE

404.1200 Miscellaneous Signal Mounting Hardware
404.1201 Pole Plate Details
404.1202 Miscellaneous Signal Mounting Hardware
404.1203 Elevator Plumbizer
404.1204 Pole Plate with Wire Guide Details
404.1205 4 Way Center Hub
404.1206 Standard Malleable Pipe Hardware -- 1½" IPS
404.1207 Post Top Mounted Adapter with Terminal Compartment
404.1208 Side Bracket Mounted Adapter with Wire Guide
VOLUME II  
TRAFFIC SIGNALS  
CONTINUED

DRAWING NUMBER

SIGNAL HARDWARE (CON'T)

404.1210  One Way Mount
404.1211  One Way Mount for 3M Signals
404.1212  One Way Mount Detail

EQUIPMENT ORIENTATION ON SIGNAL POLES

404.1301  Pole Location and Signal Mounting at Intersection (Two Pole Offset Sidewalk)
404.1302(SH)  Pole Location and Signal Mounting at Intersection (Two Pole Offset Sidewalk)
404.1400 ALT  Pole Location and Signal Mounting at Intersection, Single Pole Offset Sidewalk

404.1301  Pole Location and Signals Mounting on Right Turn Islands
404.1302(SH1)  Future Pole Location Case I (Except City of Las Vegas)
404.1302(SH2)  Future Pole Location Case II

404.1500(SH1)  Typical Traffic Signal Underground Layout with Interim Streetlighting and Service Pedestal Center of Curve Radius
404.1500(SH2)  Typical Traffic Signal Underground Layout with Interim Streetlighting and Service Pedestal End of Curve Radius

MISCELLANEOUS

404.1410  12" Arrow Lens
404.1412  Single Meter Service Pedestal
404.1413  120/240 VAC Service on Wood Pole Overhead Service
404.1414  Auxiliary Cabinet Equipment Wiring
404.1418  Installation of Conduit into Pull Box from Lip of Gutter Trench
404.1419  Installation of Conduit
404.1422  DELETED - See Uniform Standard Specifications Subsection 623G.03.07

---

*Denotes revised / added in 2003.

Revised February 2004
REINFORCED POLYMER CONCRETE COVER MARKED "FIBER OPTIC"

POLYMER COMPOSITE BODY

NOTES:
1. THIS PULL BOX SHALL NOT BE USED IN TRAVEL OR PARKING Lanes.

"P30" PULLBOX
(FOR USE IN INTERCONNECT AND COMMUNICATIONS INSTALLATIONS)
NOTES:
1. DESIGN LOAD: H-20 WHEEL LOADINGS.
2. SUITABLE FOR USE IN OFF STREET LOCATIONS WHERE NOT SUBJECT TO HIGH DENSITY TRAFFIC. IT SHALL NOT BE USED IN TRAVEL OR PARKING LANES.
3. INSIDE DIMENSIONS - 30"X48"X36"

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

"TYPE 200" PULLBOX
(FOR USE AT FIBER OPTIC SPLICE POINTS)

DATE 3-13-03  DWG. NO.  404.133  SHEET 1 OF 1
NOTE:
1. ALTERNATE LOCATIONS FOR THE POLES MAY BE APPROVED BY THE AGENCY'S TRAFFIC ENGINEER.
NOTE:
1. ALTERNATE LOCATIONS FOR THE SIGNAL POLE MAY BE APPROVED BY THE AGENCY'S TRAFFIC ENGINEER.
NOTE:
1. ALTERNATE LOCATIONS FOR THE POLES MAY BE APPROVED BY THE AGENCY'S TRAFFIC ENGINEER.
NOTE:
1. ALTERNATE LOCATIONS FOR THE SIGNAL POLE MAY BE APPROVED BY THE AGENCY'S TRAFFIC ENGINEER.
NOTES:

1. ALL TRAFFIC SIGNAL POLES SHALL BE GALVANIZED PER ASTM A123.
2. ELECTRIC UTILITY TO SHOW FEEDER TO SERVICE PEDESTAL.
3. FOR POLE, POLE FOUNDATION, SERVICE PEDESTAL AND SERVICE PEDESTAL FOUNDATION DETAILS, SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS.
4. EXTEND THE 2-2' PVC, THE 2-3' AND THE 1-PER TABLE PVC SCHEDULE 40, 5 FEET PAST EDGE OF PAVEMENT STUB AND CAP OR CONNECT TO THE EXISTING TRAFFIC SIGNAL CONDUIT.
5. ALL EMPTY CONDUIT WILL CONTAIN A SINGLE NO. 8 AWG THW OR BARE COPPER WIRE FOR THE PURPOSE OF LOCATING THE CONDUIT.
NOTES:

1. ALL TRAFFIC SIGNAL POLES SHALL BE GALVANIZED PER ASTM A 123.

2. ELECTRIC UTILITY TO SHOW FEEDER TO SERVICE PEDESTAL.

3. FOR POLE, POLE FOUNDATION, SERVICE PEDESTAL AND SERVICE PEDESTAL FOUNDATION DETAILS, SEE CLARK COUNTY AREA UNIFORM STANDARD DRAWINGS.

4. EXTEND THE 2-2" PVC, THE 2-3" AND THE 1-PER TABLE PVC SCHEDULE 40, 5 FEET PAST EDGE OF PAVEMENT STUB AND CAP OR CONNECT TO THE EXISTING TRAFFIC SIGNAL CONDUIT.

5. ALL EMPTY CONDUIT WILL CONTAIN A SINGLE NO. 8 AWG THW OR BARE COPPER WIRE FOR THE PURPOSE OF LOCATING THE CONDUIT.

SPECIFICATION REFERENCE

UNIFORM STANDARD DRAWINGS
CLARK COUNTY AREA

TYPICAL TRAFFIC SIGNAL UNDERGROUND LAYOUT WITH INTERIM STREET LIGHTING AND SERVICE PEDESTAL (END OF CURVE RADIUS)

DATE 3-13-03  DWG. NO. 404.1308  SHEET 2 OF 2