DEPARTMENT OF PUBLIC WORKS

STANDARD CONSTRUCTION DETAILS

CITY OF DALLAS, TEXAS

REVISED APRIL 1997
UPDATED SEPT. 2002
# Table of Contents

## PAVING
- Paving Sections and Street Layouts with Median Details
  - 100
- Monkton T.H.C. Median Noise
  - 102
- Paving Joint and Bridge Approach Details
  - 100
- Driveway Turnouts
  - 108
- Special Driveway Turnout Details
  - 108A
- Paving Details for Driveway and Intersections
  - 106
- Paving Half Sections and Curb Sections
  - 106
- Miscellaneous Details
  - 107

## Storm Drainage
- Standard Recessed Inlets & Curb "Y" Type Inlets
  - 208
- Double & Triple Grate Inlets
  - 202
- Fourteen Foot Inlet
  - 206
- Standard 36" & 48" Inlet & Fittings
  - 206
- Slotted Drains
  - 206
- Concrete Pipe Installation
  - 206
- Concrete Pipe Headwalls
  - 206
- Manholes and Fittings
  - 206
- Underground Utilities
  - 206
- Two, Four, Six & Eight Grate Inlet, Grate Details
  - 210

## Structures
- Retaining Wall, H.P.
  - 1008
- Retaining Wall, L.P.
  - 1002
- Standard Retaining Wall, Types 64
  - 1005
- Retaining Wall, Miscellaneous Details
  - 1008

## Alleys
- Turnouts and Slope Protection
  - 4008
- Alley Intersections
  - 4002

## Traffic Control
- Barricade Details
  - 1008
- Traffic Signal Foundation Details
  - 1009
- Typical Pavement Markings
  - 1005
- Typical Pavement Markings Details
  - 1008
- Individual Lane Pavement Markings
  - 1006
- Arrow Sand Letters for Pavement Markings
  - 1006
- Walkway Crossing Pavement Markings
  - 1007
- Traffic Signal Details
  - 1008
- Traffic Signal Details
  - 1009
- Traffic Signal Details
  - 1010
- Traffic Signal Details
  - 1011
- Traffic Signal Details
  - 1012

## Revisions
- Revised Driveway Designs to Include T-H.C. Approved Walk Areas (T46)
- Revised Driveway Designs to Include T-H.C. Approved Walk Areas (T46)
<table>
<thead>
<tr>
<th>MISCELLANEOUS</th>
<th>REVISIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALUMINIUM BRIDGE RAILING DETAILS</td>
<td>8001</td>
</tr>
<tr>
<td>MISCELLANEOUS CONSTRUCTION ITEMS</td>
<td>8002</td>
</tr>
<tr>
<td>METAL BEAM GUARD RAIL</td>
<td>8003</td>
</tr>
<tr>
<td>BICYCLE PATHS</td>
<td>8004</td>
</tr>
<tr>
<td>REINFORCED SIDE WALK AND BARRIER RAMP'S</td>
<td>8005</td>
</tr>
<tr>
<td>BARRIER RAMP RAMP AND DETAILS</td>
<td>8006</td>
</tr>
<tr>
<td>STEPS AND HANDRAIL</td>
<td>8007</td>
</tr>
<tr>
<td>CONCRETE MEDIAN BARRIER DETAIL</td>
<td>8008</td>
</tr>
<tr>
<td>STREET SIGN EQUIPMENT DETAILS</td>
<td>8009</td>
</tr>
<tr>
<td>VANE TYPE CAST IRON GRATE</td>
<td>8110</td>
</tr>
</tbody>
</table>
TYPICAL SECTIONS-DIVIDED ARTERIAL STREETS
SPACING DIAGRAM FOR JOINTS

TRANSVERSE EXPANSION JOINT

CONSTRUCTION JOINT

LOCAL & COLLECTOR STREETS

SPACING DIAGRAM FOR DOWELS AT EXPANSION JOINTS
GENERAL NOTES:

Walls are one piece units to provide a water tight factor of safety against sliding of the mass. The installation of an appropriate drainage system must be provided to prevent seepage of water between the backfill and the wall. The side slope must be 3' below the wall. The angle of internal friction (c) of the soil must be greater than 30°. The bearing capacity of the soil must be equal to or greater than the wall loading pressure. Retaining walls with heights up to 12' are constructed to be in accordance with the AASHTO Specifications. All other walls, including those in excess of 12', are constructed in accordance with the AASHTO Specifications. On horizontal grades, the top of the wall should be placed in a manner that allows for 1' of overhang in order to prevent seepage of water between the backfill and the wall. The angle of internal friction (c) of the soil must be greater than 30°. The bearing capacity of the soil must be equal to or greater than the wall loading pressure.

Expansion joints are required on walls. The expansion joint should be placed at the top and bottom of the wall. The joint should be at least 2' wide and should be placed on each side of the wall. The joint should be sealed with a non-corrosive material.

Drainage systems must be provided to prevent seepage of water between the backfill and the wall. The drainage systems should be placed at least 1' below the top of the wall. The drainage systems should be sealed with a non-corrosive material.

CONSTRUCTION JOINTS:

Joints are provided for the expansion of the wall. The joints should be at least 2' wide and should be placed on each side of the wall. The joints should be sealed with a non-corrosive material.

PART ELEVATION:

Part of the wall is shown in elevation. The elevation shows the wall with the joints and the drainage systems.

PART SECTION:

Part of the wall is shown in section. The section shows the wall with the joints and the drainage systems.

SHOWING WATERSTOP @ FOOTING JOINT:

The wall is shown with the waterstop installed at the footing joint. The waterstop is installed to prevent seepage of water between the backfill and the wall.

PVC WATERSTOP TYPE "A":

A PVC waterstop is installed at the joint. The waterstop is a flexible material that is installed to prevent seepage of water between the backfill and the wall.

PVC WATERSTOP TYPE "B":

A PVC waterstop is installed at the joint. The waterstop is a flexible material that is installed to prevent seepage of water between the backfill and the wall.
MODIFIED ALLEY TURNOUT

SECTION A-A
(DETAIL "D")
ALLEY AT A TURN PROFILE
20° 12'
GENERAL NOTES
2. AT THE OPTION OF THE CONTRACTOR THE RAIL ELEMENT OF THE GUARD RAILS MAY BE FINISHED IN EITHER 0.12" OR 0.25" THICK RADIUS. RAIL SHALL BE FINISHED WITH "Z"-TYPE BOLT SLOT FOR 5/8" DIAMETER BOLT CONNECTION TO POSTS.
3. GUARD RAILS ATTACHED TO POST SHALL BE 15'-6" IN LENGTH TO EXTEND THROUGH THE FULL THICKNESS OF THE KIT. A LOCATION OF BARRICADES SHALL BE DETERMINED BY THE ENGINEER. 5 WHERE ROAD ENCOUNTERS OR WHERE A ROADWAY PLAN SHOWN ON THE PLAN, THE DIAMETER OF HOLES AND THE MATERIAL FOR BACKFILLING SHALL BE AS DIRECTED BY THE ENGINEER.
4. TIMBER POSTS MAY BE REUDED AT ARROW "K" ON THE TOP OR BOTH END WITH HIGH SIDE PLACED TOWARD THE ROADWAY OR THEY MAY BE OMMED.

<table>
<thead>
<tr>
<th>STREET TYPE</th>
<th>LID WIDTH</th>
<th>BARRICADE WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTERIAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLLECTOR</td>
<td>1.55</td>
<td>26.3</td>
</tr>
<tr>
<td>APARTMENT</td>
<td>1.25</td>
<td>26</td>
</tr>
<tr>
<td>MODERN HIL</td>
<td>1.25</td>
<td>26</td>
</tr>
</tbody>
</table>

TRAFFIC CONTROL DETAILS
DEAD END STREET
BARRICADE
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
CITY OF DALLAS, TEXAS
LANE LINES FOR DIVIDED ARTERIALS

CONTINUOUS LEFT TURN LANE MARKINGS

LANE LINES & CENTER LINES FOR UNDIVIDED MINOR ARTERIALS (64' or more in width)

TRAFFIC LANE LINE MARKINGS (Typical)

PAVEMENT MARKINGS
36" LOCAL & COLLECTOR STREETS
NOTE:
ALL DIMENSIONS ARE +1" UNLESS OTHERWISE SHOWN.

GENERAL NO. 101:
THE PAVEMENT SPACING FOR THE LANE MARKING AND JUGGLE BAR 6"AIN 10 FEET DEPENDING ON THE APPROACH OF THE VEHICLES TO ENSURE PROPER CLEAN UP OF THE PAVEMENT MARKING.

NOTE: PLEASE REFER TO THE WARDEN’S SPECIFICATIONS FOR THE WIDTH, LOCATION, AND SPACING OF THE MARKING.

MARKERS ARE DEPICTED FOR ILLUSTRATION PURPOSES ONLY. THEY ARE NOT INTENDED TO SPECIFY ANY PARTICULAR PRODUCT.
ELONGATED ARROWS FOR PAVEMENT MARKINGS

ELONGATED LETTERS FOR PAVEMENT MARKINGS
Two Lane, Two-Way

Divided Roadway

Two-Way Left Turn Lane (TWLTL)
VALLEY GUTTER DETAIL

BIKE PATH RAMP AT PAVED STREET
(NO WALK ABUTTING CURB)

SECTION C-C

TRAIL WIDENING DETAIL

BIKE TRAIL
TYPICAL CONCRETE SECTION

BICYCLE TRAIL
TYPICAL ASPHALT SECTION

SAWN DUMMY JOINT
(AGED 15' CENTERLINE MEASURE)

DETAIL AT WIDENED WALK

MISCELLANEOUS DETAILS

BICYCLE PATHS

DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION
CITY OF DALLAS, TEXAS
NOTES:

1. SIDEWALK LUGS, KEYWAYS AND SUBGRADE STABILIZATION SHALL BE REQUIRED WITH ALL BARRIER FREE RAMPS AGAINST STREET CURB. SEE PAGE 20-65 FOR DETAILS SHOWING SIDEWALK LUG DIMENSIONS.

2. DESIGNS SHOWN ARE FOR 6" CURBS. DIMENSIONS MUST BE INCREASED PROPORTIONATELY FOR CURBS WITH HEIGHT GREATER THAN 6".

3. STREETS ON STEEP GRADE WILL REQUIRE LONGER TRANSITION ON UP-GRADE SIDE.

4. LOCATION OF BARRIER FREE RAMPS MAY BE SHIFTED TO CLEAR OBSTRUCTIONS.

5. IN ORDER MARKING PATTERN EXISTING SIDEWALK SHALL BE FOLLOWED ON NEW SIDEWALK EXCEPT THE RAMP AREA OR UNLESS OTHERWISE SPECIFIED ON THE PLANS.