

CONCRETE SIDEWALK FOR UNCURBED ROADWAYS

NOTES FOR CONCRETE SIDEWALKS ON UNCURBED ROADWAYS

- Sidewalks shall be constructed in accordance with Section 522 of the FDOT Standard Specifications.
- Sidewalks adjoining driveways 24" and wider, right in-right out composite driveways and side roads and streets shall have a detectable warning surface that extends the full width of the sidewalk and 24" (60 mm) from the edge of driveway and edge of side road and streets. Detectable warning surfaces shall conform to the requirements described in the General Notes on index No. 304.
- For sidewalks continuous through driveways, detectable warning surfaces are not required.
- For turnouts see index No. 305.
- Construct sidewalks with 7" thick Edge Beam through the limits of any surface mounted Pedestrian/Bicyclist Signal or Sign located down in the plans. See Sheet 1 for details.
- Sidewalk shall be paid for under the contract unit price for Sidewalk Concrete (1" Thick), ST.

SECTION CC
Sidewalk (5' Min.)
0.06 Max.

SECTION CC
Sidewalk
Edge Of Traveled Way
Driveway
Border

CONTINUOUS SIDEWALK
2' Detectable Warning Surface
Edge Of Traveled Way
Driveway
Border
Side Road Or Street

PLAN

JOINT LEGEND

- A- Exposed Joints (Preformed Joint Filter)
- B- Slurry Joints, Taper
- C- Formed Open Joints
- D- Saw Cut Joints, 1/8" Deep (18 Hour) Max. 5' Centers
- E- Saw Cut Joints, 1/8" Deep (18 Hour) Max. 30' Centers
- F- Exposed Joints When Max. Of Sidewalk Exceeds 100'

Intermediate locations when called for in the plans or at locations as directed by the Engineer.

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GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES

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DEFINITIONS

Regulatory Speed (In Work Zones)
The maximum permitted travel speed posted for the work zone is indicated by the regulatory speed limit signs. The work zone speed must be shown or posted in the plans. This speed should be used as the minimum design speed to determine runoff lengths, departure rates, flare rates, lengths of road clear zone widths, taper lengths, crash cushion requirements, marker spacings, superelevation and other similar features.

Advisory Speed
The maximum recommended travel speed through a curve or a hazardous area.

Travel Way
The portion of the roadway for the movement of vehicles. For traffic control through work zones, travel way may include the temporary use of shoulders and any other permanent or temporary surface intended for use as a lane for the movement of vehicular traffic.

Detour, Lane Shift, and Diversion
A detour is the redirection of traffic onto another roadway to bypass the temporary traffic control zone. A lane shift is the redirection of traffic onto a different section of the permanent pavement. A diversion is the redirection of traffic onto a temporary roadway, usually adjacent to the permanent roadway and within the limits of the right-of-way.

Above Ground Hazard
An above ground hazard is any object, material or equipment other than traffic control devices that encroaches upon the travel way or that is located within the clear zone which does not meet the Department's safety criteria, i.e., anything that is greater than 4" in height and is firm and unyielding or doesn't meet breakout requirements.

TEMPORARY TRAFFIC CONTROL DEVICES

All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time, temporary traffic control devices that are no longer appropriate shall be removed or covered. Arrow Panels, Portable Changeable Message Signs, Radar Speed Display Trailers, Portable Regulatory Signs, and any other traffic mounted devices shall be delineated with retroreflective TTC devices when in use and shall be moved outside the travel way and clear zone or be shielded by a barrier or crash cushion when not in use.

PEDESTRIAN AND BICYCLIST

When an existing pedestrian way or bicycle way is located within a traffic control work zone, accommodation must be maintained and provision for the disabled must be provided.

Only approved temporary traffic control devices may be used to delineate a temporary traffic control zone pedestrian walkway.

Advanced notification of sidewalk closures and marked detours shall be provided by appropriate signs.

RAILROADS

Railroad crossings affected by a construction project should be evaluated for traffic controls to reduce queuing on the tracks. The evaluation should include as a minimum: traffic volumes, distance from the tracks to the intersections, lane closure or taper locations, signal timing, etc.

OVERHEAD WORK

Work is only allowed over a traffic lane when one of the following options is used:

OPTION 1 (OVERHEAD WORK USING A MODIFIED LANE CLOSURE)
Overhead work using a modified lane closure is allowed if all of the following conditions are met:

- Work operation is located in a signalized intersection and limited to signals, signs, lighting and utilities.
- Work operations are 60 minutes or less.
- Speed limit is 45 mph or less.
- Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- Aerial lift equipment is placed directly below the work area to clear the lane.
- Traffic control devices are placed in advance of the vehicle/equipment closing the lane using a minimum 100 foot taper.
- Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.

OPTION 2 (OVERHEAD WORK ABOVE AN OPEN TRAFFIC LANE)
Overhead work above an open traffic lane is allowed if all of the following conditions are met:

- Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
- Work operations are 60 minutes or less.
- Speed limit is 45 mph or less.
- No encroachment by any part of the work activities and equipment within an area bounded by 2 feet outside the edge of travel way and 18 feet high.
- Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
- Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
- Other Governmental Agencies, Rail facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 3 (OVERHEAD WORK ADJACENT TO AN OPEN TRAFFIC LANE)
Overhead work adjacent to an open traffic lane is allowed if all of the following conditions are met:

- Work operation is located on a utility pole, light pole, signal pole, or their appurtenances.
- Work operations are 1 day or less.
- Speed limit is 45 mph or less.
- No encroachment by any part of the work activities and equipment within 2 feet from the edge of travel way up to 18' height.
- Above 18' in height, no encroachment by any part of the work activities and equipment over the open traffic lane (except as allowed in Option 2 for work operations of 60 minutes or less).
- Aerial lift equipment in the work area has high-intensity, rotating, flashing, oscillating, or strobe lights operating.
- Volume or complexity of the roadway may dictate additional devices, signs, flagmen and/or a traffic control officer.
- Adequate precautions are taken to prevent parts, tools, equipment and other objects from falling into open lanes of traffic.
- Other Governmental Agencies, Rail facilities, or Codes may require a greater clearance. The greater clearance required prevails as the rule.

OPTION 4 (OVERHEAD WORK USING A STANDARD LANE CLOSURE)
The lane directly below the overhead work is closed in accordance with the appropriate standard index drawing or detailed in the plans.

SIGHT DISTANCE

Tapers: Transition tapers should be obvious to drivers. If restricted sight distance is a problem (e.g., a sharp vertical or horizontal curve), the taper should begin well in advance of the view obstruction. The beginning of tapers should not be hidden behind curves.

Intersections: Traffic control devices at intersections must provide sight distances for the road user to perceive potential conflicts and to traverse the intersection safely.

ABOVE GROUND HAZARD

Above ground hazards (see definitions) are to be considered work areas during working hours and treated with appropriate work zone traffic control procedures. During nonworking hours, all objects, materials and equipment that constitute an above ground hazard must be stored/placed outside the travel way and clear zone or be shielded by a barrier or crash cushion.

For above ground hazards within a work zone the clear zone required should be based on the regulatory speed posted during construction.

CLEAR ZONE WIDTHS FOR WORK ZONES

The term 'clear zone' describes the unobstructed relatively flat area, impacted by construction, extending outward from the edge of the travel lane. The table below gives clear zone widths in work zones for medians and roadside conditions other than for roadside canals; where roadside canals are present, clear zone widths are to conform with the distances to canals as described in Volume 1, Chapter 7, Section 4.2 and Exhibit 4-A and 4-B of the Plans Preparation Manual.

WORK ZONE SPEED (MPH)	WIDTHS (Feet)
60-70	30
55	24
45-50	18
30-40	14
ALL SPEEDS	4' BEHIND FACE OF CURB & GUTTER

SUPERELEVATION

Horizontal curves constructed in conjunction with work zone traffic control should have the required superelevation applied to the design radii. Under conditions where normal cross slope controls curvature, the minimum radii that can be applied are listed in the table below.

MINIMUM RADIUS FOR NORMAL CROSS SLOPES		
DESIGN SPEED (MPH)	FEET	FEET
65	3130	
60	2400	
50	1640	
40	1130	
35	1080	
30	820	
20	430	

Superelevate When Smaller Radii Used

GENERAL INFORMATION FOR TRAFFIC CONTROL THROUGH WORK ZONES

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PREFACE

All projects and works on highways, roads and streets shall have a traffic control plan. All work shall be executed under the established plan and Department approved procedures. This index contains information specific to the Federal and State guidelines and standards for the preparation of traffic control plans and for the execution of traffic control in work zones, for construction and maintenance operations and utility work on highways, roads and streets on the State Highway System. Certain requirements in this index are based on the high volume nature of State Highways. For highways, roads and streets off the State Highway System, the local agency (City/County) having jurisdiction may adopt requirements based on the minimum requirements provided in the MUTCD.

Index No. 600 provides Department policy and standards. Changes are only to be made thru Department approved procedures. Index Nos. 601 thru 670 provide typical applications for various situations. Modification can be made to these indexes as long as the changes comply with the MUTCD and Department Design Standards.

The sign spacings shown on the indexes are typical (recommended) distances. These distances may be increased or decreased based on field conditions, in order to avoid conflicts or to improve site specific traffic controls.

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

The Florida Department of Transportation has adopted the "Manual On Uniform Traffic Control Devices For Streets And Highways" (MUTCD) and subsequent revisions and addendums, as published by the U.S. Department of Transportation, Federal Highway Administration, for mandatory use on the State Maintained Highway System whenever there exists the need for construction, maintenance operations or utility work.

ABBREVIATIONS

Abbreviations assigned to the 600 series Design Standards and applicable to traffic control plans, unless otherwise identified in the plans, are as follows:

CFR	Code of Federal Regulations
DTCE	District Traffic Operations Engineer
FDOT	Florida Department Of Transportation
HAR	Highway Advisory Radio
L	Taper Length, Buffer Length Or Taper Length Plus Buffer Space
MAS	Motorist Awareness System
MOT	Maintenance Of Traffic
MOTC	Maintenance Of Traffic Committee
MUTCD	Manual On Uniform Traffic Control Devices For Streets And Highways
NCHRP	National Cooperative Highway Research Program
PCMS	Portable Changeable (Variable) Message Sign
FRS	Portable Regulatory Sign
R	Radius
RFM	Raised Retroreflective Pavement Marker
RSU	Radar Speed Display Unit
S	Posted Speed Or Off-Peak 85 Percentile Speed (MPH)
SLEO	Speed and Law Enforcement Officer
TTC	Temporary Traffic Control
TCP	Traffic Control Plans
TCZ	Traffic Control Zones
TMA	Truck Mounted Attenuator
VECP	Value Engineering Change Proposal
W	Width Of Taper Transition In Feet, I.e., Lateral Offset

SYMBOLS

The symbols shown are found in the FDOT site menu under Traffic Control and Library on the CAD system. Symbols assigned to the 600 series Design Standards and applicable to traffic control plans, unless otherwise identified in the plans, are as follows:

- Work Area, Hazard Or Work Phase (Any pattern within a boundary)
- Sign With 18" x 18" (Min.) Orange Flag And Type B Light
- Channelizing Device
- Type I Or Type II Barricade Or Vertical Panel Or Drum
- Type I Or Type II Barricade Or Vertical Panel Or Drum (With Flashing Light At Night Only)
- Type I Or Type II Barricade Or Vertical Panel Or Drum (With Steady Burning Light At Night Only)
- Type I Or Type II Barricade Or Vertical Panel Or Cone Or Tubular Marker Or Drum
- Cone Or Tubular Marker
- Type I, Type II Or Type III Barricade Or Vertical Panel Or Drum (With Flashing Light)
- Type I, Type II Or Type III Barricade Or Vertical Panel Or Drum (With Steady Burning Light)
- Type II Barricade
- Type III Barricade (With Flashing Light)
- Type III Barricade (With Steady Burning Light)
- Work Zone Sign
- Flagger
- Traffic Signal
- Advance Warning Arrow Panel
- Portable Signal
- Crash Cushion
- Stop Bar
- Work Vehicle With Flashing Beacon
- Shadow (S) Or Advance Warning (AW) Vehicle With Advance Warning Arrow Panel And Warning Sign
- Truck Mounted Attenuator (TMA)
- Orange Flag For TCZ Signs
- Type B Light For TCZ Signs
- Law Enforcement Officer
- Portable Regulatory Sign
- Radar Speed Display Unit
- Portable Changeable (Variable) Message Sign
- Lane Identification + Direction Of Traffic

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OVERWEIGHT/OVERSIZE VEHICLES

Restrictions to Lane Widths, Heights or Load Capacity can greatly impact the movement of over dimensioned loads. The Contractor shall notify the Engineer who in turn shall notify the State Permits Office, phone no. (850) 410-5777, at least seven calendar days in advance of implementing a maintenance of traffic plan which will impact the flow of overweight/oversized vehicles. Information provided shall include location, type of restriction (height, width or weight) and restriction time frames. When the roadway is restored to normal service the State Permits Office shall be notified immediately.

LANE WIDTHS

Lane widths of through roadways should be maintained through work zone travel ways wherever practical. The minimum widths for work zone travel lanes shall be as follows: 'I' for Interstate with at least one 12' lane provided in each direction, unless formally elected by the Federal Highway Administration; 'II' for Freeways; and '10' for all other facilities.

LENGTH OF LANE CLOSURES

Lane closures shall not exceed 2 miles in total length (taper, buffer space and work space) in any given direction on the Interstate or on state highways with a posted speed of 55 MPH or greater.

TEMPORARY RAISED RUMBLE STRIP SET (PAVED SHOULDER SHOWN)

GENERAL NOTES

- Temporary raised rumble strip sets should be placed in advance of each flagging station when called for in the plans.
- Temporary raised rumble strip sets are used to supplement a series of advanced warning signs and shall be installed and removed when the signs are installed and removed.
- Remove the temporary raised rumble strips prior to removing the advance warning signs.

DESIGNED BY: NO. DATE

PROJECT MANAGER: LAURA S. ANDREWS, PE FILE NAME: LSK WTR C-704_DWG DATE: 10/11/08 ACCOUNT: 101107

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UPSIZE POTABLE WATER TRANSMISSION MAIN
TOWN OF LONGBOAT KEY, SARASOTA COUNTY, FLORIDA

FDOT DETAILS 310 PG 2 & 600 PG 1-3

DRWG. NO.: C-704
SHT. 51 OF 55

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REVISIONS

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DRAWING SIZE 24" x 36" - USE GRAPHIC SCALE OTHERWISE.