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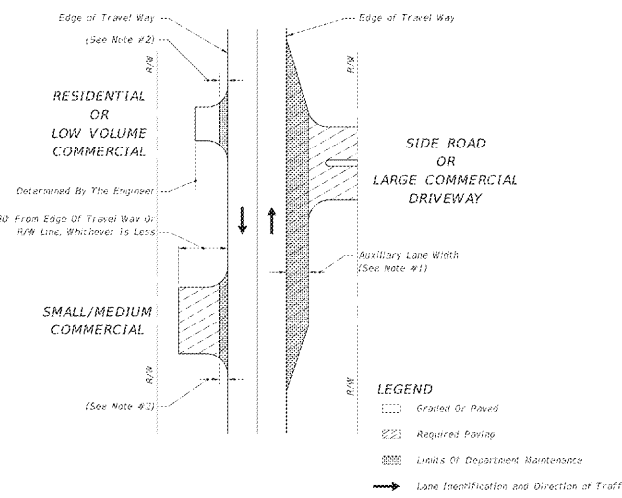
**MATERIAL TYPES AND THICKNESSES IN DRIVING AREAS FOR ALL CONNECTIONS**

Course	Materials	Thickness (in.)	
		Connections	Roadway
Structural	Asphaltic Concrete	1"	1 1/2"
Base	Optional Base (See Spec. Section 205)	O.B.C. 1	O.P.C. 3

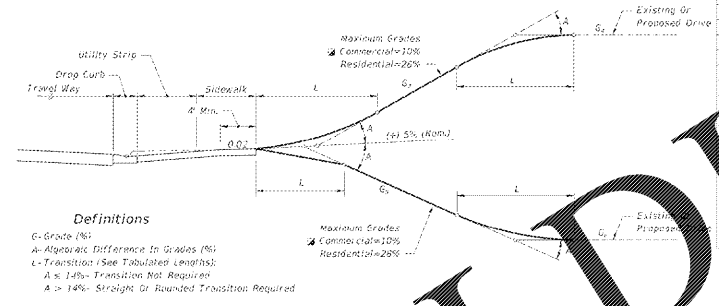
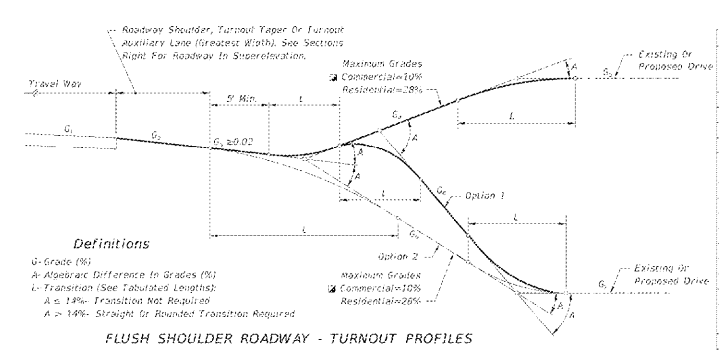
**NOTES**

- The pavement should be structurally adequate to meet the expected traffic loads and should not be less than that shown above, except as approved by the Department for graded connections. Other Department-approved equivalent pavements may be used at the discretion of the Engineer.
- Auxiliary lanes and their transition tapers shall be the same structure as the abutting travel way pavement thickness or any of the roadway structures tabulated above, whichever is thicker.
- If an asphalt base course is used for a turnout, its thickness may be increased to match the edge of travel way pavement thickness in lieu of a separate structural course. If Portland cement concrete will be acceptable in lieu of the asphalt base and structural courses. See Notes 4 and 5 below.
- A structural course is required for flexible pavements when they are used for auxiliary lanes serving more than a single connection.
- Connections paved with Portland cement concrete shall be Class #3 concrete at least 6" thick. The Department may require greater thickness when called for in the plans or stipulated by permit. Materials and construction shall conform with FDOT Standard Specifications Sections 347, 350 and 322.
- The Department may require other pavement criteria above local ordinance warrant.

**PAVEMENT STRUCTURE FOR TURNOUTS AND AUXILIARY LANES TABLE 515-1**



- NOTES**
- Auxiliary lane pavements and crossover pavements shall be maintained by the Department.
  - Department maintenance of turnout pavement extends 5' from edge of the travel way or to the edge of paved shoulder, whichever is greater. The remainder of any curbed paved area on the right of way shall be maintained by the owner or his authorized agent. As a function of routinely reworking shoulders, the Department may grade and shape existing material on nonpaved areas beyond the maintained pavement.
  - Control and maintenance of drainage facilities within the right of way shall be solely the responsibility of the Department, unless approved differently by Department permit.
  - The maintenance and operation of highway lighting, traffic signals, ancillary equipment, and other necessary devices shall be the responsibility of a public agency.
  - All pavement markings on the State highways, including acceleration and deceleration lane markings, and signing installed for the operation of the State highway shall be maintained by the Department.
  - All signing and marking installed for the operation of the connection such as stop bars and stop signs for the connection shall be the responsibility of the permittee.
- LEGEND**
- Graded Or Paved
  - Required Paving
  - Lines Of Department Maintenance
  - Lane Identification and Direction of Traffic
- LIMITS OF CONSTRUCTION AND MAINTENANCE FOR FLUSH SHOULDER ROADWAY CONNECTIONS**



- DEFINITIONS**
- G-Grade (%)  
 A-Algebraic Difference In Grades (%)  
 L-Transition (See Tabulated Lengths)  
 A ≤ 14% - Transition Not Required  
 A > 14% - Straight Or Rounded Transition Required
- DEFINITIONS**
- G-Grade (%)  
 A-Algebraic Difference In Grades (%)  
 L-Transition (See Tabulated Lengths)  
 A ≤ 14% - Transition Not Required  
 A > 14% - Straight Or Rounded Transition Required
- TURNOUT PROFILES**
- Turnouts shall neither cause water to flow on or across the roadway pavement, nor cause water to pond within the State right of way. On all Flush Shoulder Roadway turnouts the shoulder (L) nearest the roadway shall be sloped or crowned to direct stormwater runoff to the roadside ditch, drains, flumes or other appropriate runoff control devices that be constructed when runoff volumes are sufficient to cause erosion of the shoulder. Similar runoff control devices shall be constructed as necessary to properly direct and control the stormwater runoff on Curbed Roadway turnouts.
  - The Option 1 profile is intended for locations where roadway, turnout taper and auxiliary lane stormwater runoff volumes are relatively large. The Option 2 profile is intended for locations where runoff volumes are relatively small and/or where there is no roadside ditch.

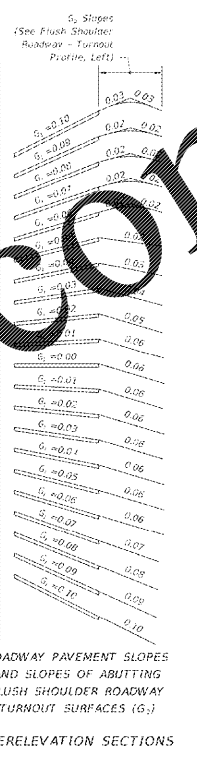
**LENGTHS (L) (FT.)**

A	CRESTS				SAGS			
	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED	STRAIGHT	ROUNDED
6-13%	3	0	5	0	3	0	5	0
14%	3	0	10	0	3	0	10	0
15%	3	0	10	0	3	0	10	0
16%	3	0	10	0	3	0	10	0
17%	6	3.5	10	5	6	3.5	10	5
18%	6	4	10	6	6	4	10	6
19%	7	4.5	10	7	7	4.5	10	7
20%	8	5	11	8	8	5	11	8
21%	9	5.5	12	9	9	5.5	12	9
22%	10	6	13	10	10	6	13	10
23%	10	6.5	14	10.5	10	6.5	14	10.5
24%	11	7	15	11	11	7	15	11
25%	12	7.5	15	11.5	12	7.5	15	11.5
26%	12	8	16	12	12	8	16	12
27%	13	8.5	17	12.5	13	8.5	17	12.5
28%	14	9	17	13	14	9	17	13
29%	NA	NA	22	14	NA	NA	22	14
30-33%	NA	NA	23	15	NA	NA	23	15
34-36%	NA	NA	24	16	NA	NA	24	16
37-38%	NA	NA	26	18	NA	NA	26	18
39-41%	NA	NA	28	20	NA	NA	28	20
42-43%	NA	NA	30	22	NA	NA	30	22
44-46%	NA	NA	31	24	NA	NA	31	24
47-49%	NA	NA	33	26	NA	NA	33	26
50-51%	NA	NA	34	28	NA	NA	34	28
52-54%	NA	NA	36	30	NA	NA	36	30
55-56%	NA	NA	37	32	NA	NA	37	32

**RECOMMENDED TURNOUT PROFILE TRANSITION LENGTHS (L) (FT.)**

**ROADWAY PAVEMENT SLOPES AND SLOPES OF ABUTTING FLUSH SHOULDER ROADWAY TURNOUT SURFACES (G.)**

**SUPERELEVATION SECTIONS**



LAST REVISION: 11/01/16	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	TURNOUTS AND DRIVEWAYS	INDEX NO. 515	SHEET NO. 6 of 7	LAST REVISION:	DESCRIPTION:	FY 2017-18 DESIGN STANDARDS	TURNOUTS AND DRIVEWAYS	INDEX NO. 515	SHEET NO. 7 of 7
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**REVISIONS**

NO.	DESCRIPTION	DATE	CHECKED	APP. BY

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**ROW FDOT INDEXES**

**RW-7**