

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)
40 mph or less	200 / 200
45 mph	350 / 350
50 mph or greater	500 / 500

*Midway between signs.

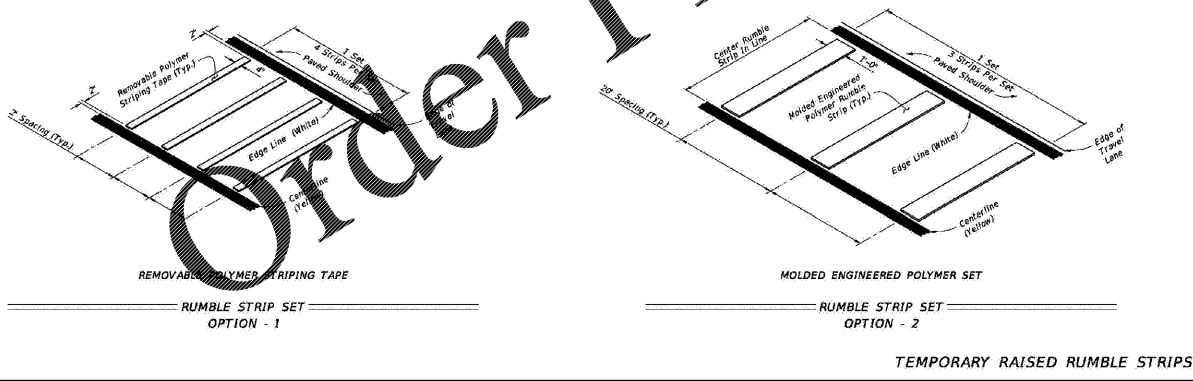
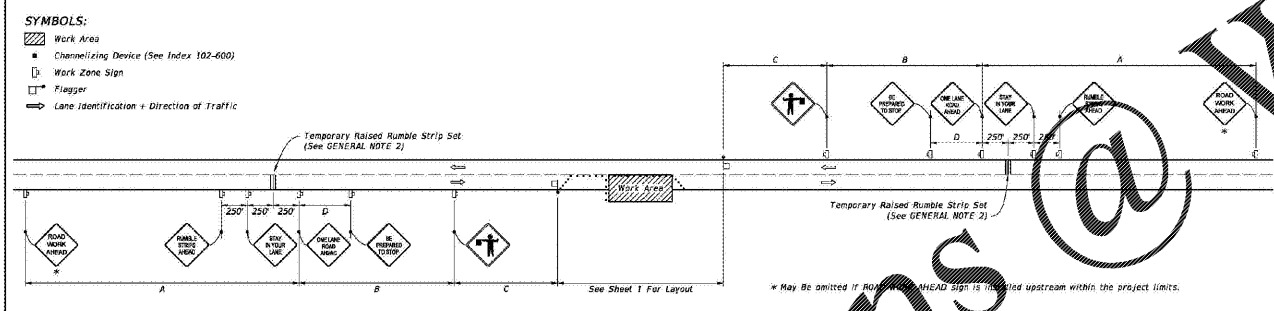
**Table 1
Device Spacing**

Speed (mph)	Max. Distance Between Devices (ft.)	
	Type I or Type II Cones or Tubular Markers	Type I or Type II Barricades or Vertical Panels or Drums
25	25	50
30 to 45	25	50
50 to 70	25	50

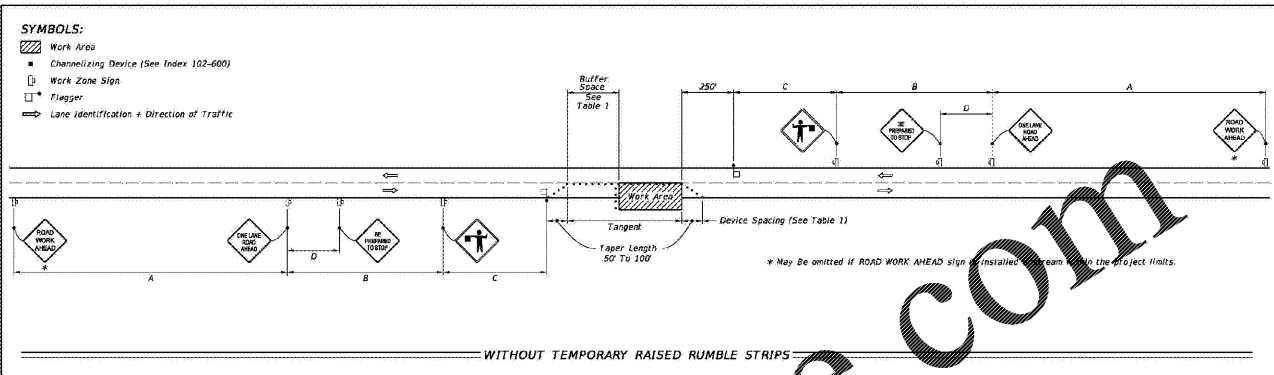
**Table 11
Taper Length - Shoulder**

Speed (mph)	BL (ft.)			Notes
	#1	#2	#3	
25	28	35	42	L ₁ = WS ² / 60
30	40	50	60	
35	55	68	82	L ₂ = WS ² / 60
40	72	90	107	
45	120	150	180	L ₃ = WS ² / 60
50	133	167	200	
55	147	183	220	L ₄ = WS ² / 60
60	160	200	240	
65	173	217	260	L ₅ = WS ² / 60
70	187	233	280	

LAST REVISION: 11/01/17	DESCRIPTION: STANDARD PLANS	FY 2019-20	TWO-LANE, TWO-WAY, WORK ON SHOULDER	INDEX: 102-602	SHEET: 1 of 1
-------------------------	-----------------------------	------------	-------------------------------------	----------------	---------------



LAST REVISION: 11/01/17	DESCRIPTION: STANDARD PLANS	FY 2019-20	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	INDEX: 102-603	SHEET: 2 of 3
-------------------------	-----------------------------	------------	---	----------------	---------------



**TABLE 1
DEVICE SPACING**

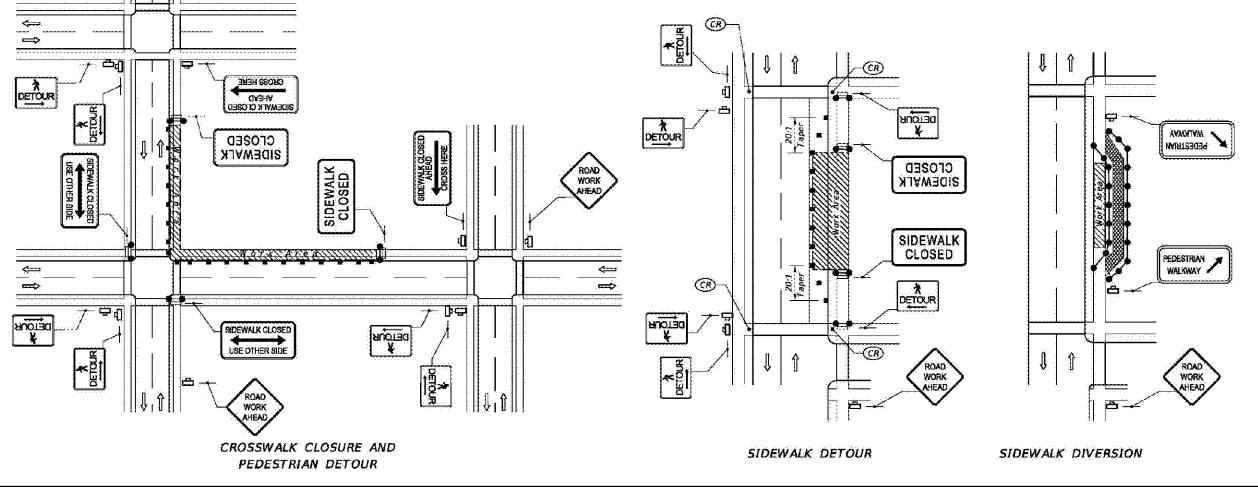
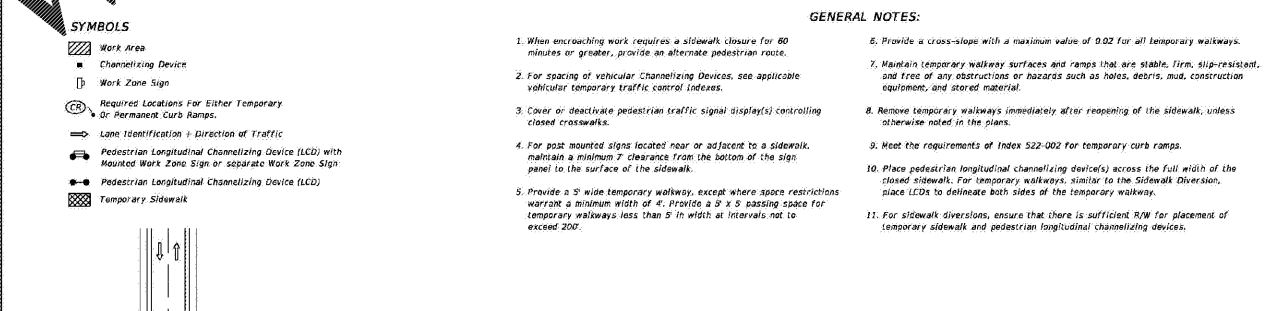
Posted Speed	Maximum Spacing of Cones or Tubular Markers		Maximum Spacing of Type I or Type II Barricades/Panels/Drums		Distance Between Signs				Buffer Space
	On a Taper	On a Tangent	On a Taper	On a Tangent	A	B	C	D	
25	20	30	20	30	200	200	200	100	150
30	20	30	20	30	200	200	200	100	200
35	20	30	20	30	200	200	200	100	250
40	20	30	20	30	200	200	200	100	300
45	20	30	20	30	350	350	350	175	360
50	20	30	20	30	500	500	500	250	420
55	20	30	20	30	2640	1500	1000	500	495
60	20	30	20	30	2640	1500	1000	500	570
65	20	30	20	30	2640	1500	1000	500	645
70	20	30	20	30	2640	1500	1000	500	730

GENERAL NOTES:

- Special Conditions may be required in accordance with these notes and the following sheets:
 - If an active railroad crossing is located closer to the Work Area than the queue length plus 300 feet, extend the Buffer Space as shown on Sheet 3.
 - If the queuing of vehicles across an active railroad crossing cannot be avoided, provide a uniform traffic control officer or flagger at the highway-rail grade crossing to prevent vehicles from stopping within devices in the queue.
 - If the Work Area encroaches on the Centerline, use the Layout for Temporary Lane Shifts to Shoulder on Sheet 3 only if the Existing Pavement Shoulder width is sufficient to provide for an 11' lane between the Work Area and the Edge of Existing Pavement Shoulder. Reduce the posted speed when appropriate.
- Temporary Raised Rumble Strips:
 - Use when both of the following conditions are met: concurrent work operations are in progress; existing posted speed is 55 mph or greater; work duration is greater than 60 minutes.
 - Use a consistent Strip Color throughout the Work Zone.
 - Place each Rumble Strip Set Transverse across the lane at locations shown.
 - Use Option 1 or Option 2 as shown on Sheets 2 and 3. Use only one option throughout work zone.
- Additional one-way control may be required by the following means:
 - Flag-carrying vehicle.
 - Channelizing device.
 - Pile vehicles.
 - Traffic signs.
- When flaggers are the sole method of one-way control, the flaggers must be in sight of each other to direct communication at all times.
- When a side road intersects the highway within the TTC zone, additional TTC devices in accordance with other applicable TTC Indexes.
- The two channelizing devices immediately adjacent to the work area must be omitted provided vehicles in the work area have high-intensity rotating flashing, oscillating, or strobe lights operating.
- When Buffer Space cannot be maintained due to geometric constraints, use the greatest attainable length, but less than 300 feet for posted speeds greater than 40 mph.
- ROAD WORK AHEAD signs shall be PRECEDED TO STOP signs. May be omitted if the following conditions are met:
 - Work operations are continuous.
 - Work duration is 45 minutes or less.
 - There are no sight obstructions to vehicles approaching the work area for a distance equal to the taper length shown in Table 1.
 - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
 - Volume of traffic of the roadway has been considered.
 - If a railroad crossing is present, vehicles will not queue across rail tracks.
 - APDs are used.
- See Index 102-600 for general TTC requirements and additional information.
- Approved Flagger Assistance Devices (FADs) may be used in accordance with Specifications Section 102.990 and the APL vendor drawings.

CONDITIONS
WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRUSH THE AREA CLOSER THAN 10' BUT NOT CLOSER THAN 2' TO THE EDGE OF TRAVEL WAY.

LAST REVISION: 11/01/17	DESCRIPTION: STANDARD PLANS	FY 2019-20	TWO-LANE, TWO-WAY, WORK WITHIN THE TRAVEL WAY	INDEX: 102-603	SHEET: 1 of 3
-------------------------	-----------------------------	------------	---	----------------	---------------

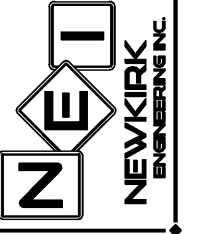


LAST REVISION: 11/01/17	DESCRIPTION: STANDARD PLANS	FY 2019-20	PEDESTRIAN CONTROL FOR CLOSURE OF SIDEWALKS	INDEX: 102-660	SHEET: 1 of 1
-------------------------	-----------------------------	------------	---	----------------	---------------

REVISIONS

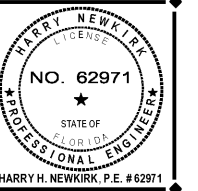
DATE	DESCRIPTION

1230 North US1, Suite 3
Ormond Beach, Florida 32174
Phone (866) 872-7794
www.newkirk-engineering.com
C.A. # 30209
L.C. # 2600684
© 2013
Civil Engineering, CEI & Landscape Architecture
NEWKIRK ENGINEERING INC.



MAINTENANCE OF TRAFFIC
DAIRY QUEEN
6567 US-90
GLEN ST. MARY, FL 32040

THIS DRAWING IS THE PROPERTY OF NEWKIRK ENGINEERING ANY USE OR REPRODUCTION IN WHOLE OR PART IS PROHIBITED WITHOUT THE EXPRESSED WRITTEN CONSENT OF NEWKIRK ENGINEERING COPYRIGHT © 2013 ALL RIGHTS RESERVED



PROJECT No: 2020-307
DATE: DECEMBER 2020
DESIGN BY: HHN
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: AS SHOWN
DRAWING NUMBER

17