

# PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS FEBRUARY 2021

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NOTE: FOR LANE LAYOUT AND RIGHT-OF-WAY REQUIREMENTS ON STANDARD SECTIONS  
AND EXPANDED INTERSECTIONS SEE ROADWAY PRODUCTION PALM BEACH COUNTY  
THOROUGHFARE ROADS TYPICAL SECTIONS

# NO.T-P-21

**GENERAL NOTES:**

1. THERMOPLASTIC SHALL CONFORM TO THE REQUIREMENTS OF THE FLORIDA DEPT. OF TRANSPORTATION (F.D.O.T.) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SEE SECTION 711-001. MINIMUM THICKNESS SHALL BE 90MILS (ALKYD ONLY), EXTRUDED ONLY, ON ALL COUNTY MAINTAINED ROADWAYS.
2. EXISTING ROAD SURFACE SHALL BE OVERLAID THROUGHOUT THE LIMITS OF CONSTRUCTION IF THE EXISTING PAVEMENT MARKINGS ARE INCONSISTENT WITH THOSE PROPOSED UNLESS OTHERWISE APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER.
3. THERMOPLASTIC SHALL BE USED UNLESS OTHERWISE APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER.
4. ALL PAVEMENT MARKINGS SHALL BE INSTALLED OR REPLACED ON EACH APPROACH WITH THE SAME MATERIAL USED AT THE TRANSITION, CONSTRUCTED FOR A DISTANCE (X), (SEE CHART 1, SHEET 3) TO CONFORM WITH EXISTING ROADWAY DESIGN AS APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER.
5. SPEED EQUALS POSTED SPEED IN M.P.H. OR DESIGN SPEED, WHICHEVER IS GREATER.
6. DIMENSIONS AND GEOMETRIC LAYOUTS INDICATED IN THIS DOCUMENT REPRESENT MINIMUM REQUIREMENTS AND DO NOT SUPERSEDE THE NEED FOR FURTHER ENGINEERING DESIGN TO MEET THE NEEDS OF SPECIFIC PROJECTS.
7. PAVEMENT MARKING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE M.U.T.C.D. & F.D.O.T. ROADWAY & TRAFFIC DESIGN STANDARDS (LATEST EDITION), HOWEVER, WHERE CONFLICTS EXIST, THIS TYPICAL SHALL TAKE PRECEDENT OVER F.D.O.T. STANDARD SPECIFICATIONS.
8. ALL EXISTING ABOVE GROUND UTILITIES AND ANY OBJECTS WITHIN THE RIGHT-OF-WAY OR RECOVERY AREA, WHICHEVER IS GREATER (WITHIN THE LIMITS OF CONSTRUCTION), SHALL BE SHOWN ON THE PAVEMENT MARKING PLANS.
9. DESIGN SPEED SHALL BE SHOWN ON PLANS.
10. TRANSITION FROM PAVED SHOULDER TO EXISTING PAVEMENT EDGE SHALL BE 30:1 MIN.
11. IF EXISTING PAVEMENT MARKING MATERIAL IS NOT COMPATIBLE WITH ALKYD THERMOPLASTIC, IT SHALL BE REMOVED PRIOR TO COMMENCEMENT OF WORK.
12. DISTANCE BETWEEN THE STOP BAR AND CROSSWALK SHALL BE A MINIMUM OF 4 FEET.
13. ANY PAVEMENT WIDENING, TURNOUTS AND STREET IMPROVEMENTS WITHIN DISTANCE (X) (SEE CHART 1, SHEET 3), SHALL BE SHOWN ON PLANS.
14. 2' MIN. PAVED SHOULDERS SHALL BE USED ON NON-PLAN COLLECTOR AND NON-THOROUGHFARE ROADWAYS.  
4' MIN. PAVED SHOULDERS SHALL BE USED ON THOROUGHFARE ROADWAYS UNLESS OTHERWISE SHOWN IN ROADWAY PRODUCTION TYPICAL SECTIONS.
15. THERMOPLASTIC SHALL NOT BE INSTALLED ON ROADWAY UNTIL FOURTEEN CALENDAR DAYS AFTER THE FINAL LIFT OF ASPHALT HAS BEEN COMPLETED, UNLESS OTHERWISE SPECIFIED BY PALM BEACH COUNTY TRAFFIC ENGINEER.
16. ALL PAVEMENT MARKINGS SHALL HAVE REFLECTIVITY OF NOT LESS THAN 300 MINICANDELAS AT INSTALLATION.
17. ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE 6" WIDE, UNLESS OTHERWISE NOTED, PER F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS OR PALM BEACH COUNTY DESIGN STANDARDS .
18. IF THE PROPOSED TRANSITION FALLS WITHIN DISTANCE (X) (SEE CHART 1, PAGE 2), OF AN EXISTING TURN LANE TRANSITION, THEN THE AREA BETWEEN TRANSITIONS SHALL BE CONSTRUCTED AS A CONTINUOUS WIDENED SECTION, FOR GEOMETRIC CONTINUITY.
19. VARIATIONS FROM THIS STANDARD SHALL BE APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER.
20. DRAWINGS SHALL BE SUBMITTED EITHER IN 1"=20', 1"=30' OR 1"=40' SCALE.
21. ALL PAVEMENT MARKINGS SHALL BE SHOWN TO SCALE ON THE PLANS.
22. ALL REFLECTIVE PAVEMENT MARKERS SHALL BE APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER BEFORE INSTALLATION.
23. ALL MARKERS SHALL BE CLASS "B" AS PER F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE SECTION 706.
24.  SHOWS TRAFFIC FLOW. NOT A PAVEMENT MARKING.
25. REFLECTORS SHALL BE PLACED AT EACH CROSS HATCH. SPACING VARIES WITH SPEED AS SHOWN ON THIS TYPICAL. (SHEET 5)
26. REFLECTORS SHALL BE EQUALLY SPACED BETWEEN POINTS A AND B BUT NO MORE THAN 12" APART. (SHEET 5)
27. EPOXY OR BITUMINOUS SHALL BE USED WHEN INSTALLING R.P.M.'S ON CONCRETE OR ASPHALT PAVEMENT. THERMOPLASTIC MAY BE USED TO SET R.P.M.'S ON ASPHALT PAVEMENT ONLY.
28. R.P.M 's SHALL BE PLACED 1" (ONE INCH) TO THE LEFT OR RIGHT OF LINE.
29. 'O' OR 'F.D.P.' DENOTES FLEXIBLE DELINEATOR POST.
30. ALL PAVEMENT MARKING MATERIAL SHALL BE ON THE APPROVED FLORIDA DEPARTMENT OF TRANSPORTATION "QUALITY PRODUCTS LIST" (QPL) AND APPROVED BY P.B.C. TRAFFIC ENGINEER, BEFORE INSTALLATION ON COUNTY ROADWAYS.
31. ALL REMOVAL OF PAVEMENT MESSAGES AND ARROWS SHALL BE IN BLOCK STYLE SUCH THAT THE MESSAGE IS NO LONGER DISCERNIBLE. METHOD OF REMOVAL SHALL BE APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER.

32. WHEN TRAFFIC EXCEEDS 75 VEHICLES PER HOUR FOR RIGHT TURNS OR 30 VEHICLES PER HOUR FOR LEFT TURNS, THE TURN LANES SHALL BE CONSTRUCTED AS PER SHEET 3 OF 12.
33. FOR SIGN SIZES REFER TO TABLES 2B-1 AND 2C-2 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
34. PAVER STONE SHALL CONFORM WITH PALM BEACH COUNTY LAND DEVELOPMENT DESIGN STANDARDS WITH THE FOLLOWING EXCEPTIONS:  
  
 UNDER II MATERIAL 2.1 # A.3. THE COLORING SHALL CONFORM WITH F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION SECTION 971-1.6)  
  
 AS AN OPTION:  
 STAMARK COLD PLASTIC SERIES 390 WAFFLE TAPE OR APPROVED EQUAL MAY BE USED ON PAVER STONE. EPOXY PAINT MAY BE USED AS ALTERNATE. (SHERWIN WILLIAMS TILE-CLAD HS EPOXY OR APPROVED EQUAL)  
  
 GLASS SPHERES SHALL MEET THE REQUIREMENTS OF SECTIONS 971-1 AND 971-2 WITH THE RETROREFLECTIVITY TO BE NOT LESS THAN 300 MILLICANDELAS.  
  
 WHEN HEADER CURB IS USED TO OUTLINE A CROSSWALK THE CURB SHALL BE OF WHITE CONCRETE WITH GLASS SPHERES OR WHITE WAFFLE TAPE.  
  
 THE PAVER STONE SHALL BE PRE-APPROVED BY PALM BEACH COUNTY TRAFFIC ENGINEER PRIOR TO THE INSTALLATION.  
  
 NO PAVER STONE SHALL BE CONSTRUCTED WITHIN PALM BEACH COUNTY RIGHT OF WAY UNLESS PERMITTED BY THE COUNTY ENGINEER AND THE OWNERS ENTER INTO A REMOVAL AGREEMENT WITH THE COUNTY (LAND DEVELOPMENT DIVISION). PAVER STONE WILL NOT BE PERMITTED FOR SIDEWALK CONSTRUCTION.  
  
 FOR PAVER STONE INSTALLATION ON COUNTY THOROUGHFARE ROAD RIGHT OF WAY REFER TO PPM ED-0-015  
  
 FOR PRIVATE SUBDIVISIONS THAT ARE EXPECTED TO HAVE A TRAFFIC SIGNAL, NO PAVER STONE SHALL BE CONSTRUCTED 60' FROM RIGHT OF WAY ON OUTGOING LANE(S). INCOMING ROADWAY PAVER STONE MAY START AT THE RIGHT OF WAY LINE. BEFORE INSTALLATION OF THE TRAFFIC SIGNAL THE HOME OWNER ASSOCIATION WILL BE REQUIRED TO REMOVE THE PAVER STONES.
35. FOR BICYCLE MARKINGS SEE FLORIDA GREEN BOOK CHAPTER 9 AND TYPICALS WITH THE FOLLOWING MODIFICATIONS. BICYCLE MARKINGS SHALL BE PROVIDED AT THE BEGINING OF BIKE LANES AND AT 1/4 MILE INTERVALS. BICYCLE SIGNS SHALL BE INSTALLED AT THE BEGINING AND END OF BIKELANES ONLY. R4-4 SIGNS SHALL NOT BE USED. FOR STANDARD BUFFERED BIKELANE SEE FIGURE 9-17 OF GREEN BOOK BICYCLE MARKINGS SHALL BE PROVIDED AT ALL SIGNALIZED INTERSECTIONS PER FLORIDA GREEN BOOK
36. ALL SIGNS SHALL BE DIAMOND GRADE REFLECTIVE SHEETING.
37. TRANSITION RATES AT THE INTERSECTION APPROACHES SHALL BE:  
30:1 FOR ≤ 40 MPH  
45:1 FOR 45 MPH
38. ALL RAILROAD GRADE CROSSINGS SHALL HAVE DYNAMIC ENVELOPE PAVEMENT MARKINGS PER FDOT INDEX 509-070

**STRIPING KEY**

- |                                 |                                  |                                    |
|---------------------------------|----------------------------------|------------------------------------|
| A = 6" SOLID WHITE              | G = 6" SKIP WHITE TYP (6'-10')   | N = 6" SKIP YELLOW TYP (2'-4')     |
| B = 8" SOLID WHITE              | H = 6" SKIP WHITE TYP (2'-4')    | P = RPM BI-DIRECTIONAL AMBER/AMBER |
| C = 12" SOLID WHITE             | I = 6" SOLID YELLOW              | R = FDP WHITE                      |
| D = 18" SOLID WHITE             | J = 18" SOLID YELLOW             | S = FDP YELLOW                     |
| E = 24" SOLID WHITE             | K = 6" DOUBLE YELLOW             | T = RPM BI-DIRECTIONAL WHITE/RED   |
| F = 6" SKIP WHITE TYP (10'-30') | L = 6" SKIP YELLOW TYP (10'-30') | U = RPM BI-DIRECTIONAL RED/YELLOW  |
|                                 | M = 6" SKIP YELLOW TYP (6'-10')  |                                    |



PALM BEACH COUNTY, FLORIDA  
**TRAFFIC DIVISION**  
TYPICAL

GENERAL NOTES

3/13/21  
BOGDAN T. PIORKOWSKI  
SENIOR PROFESSIONAL ENGINEER

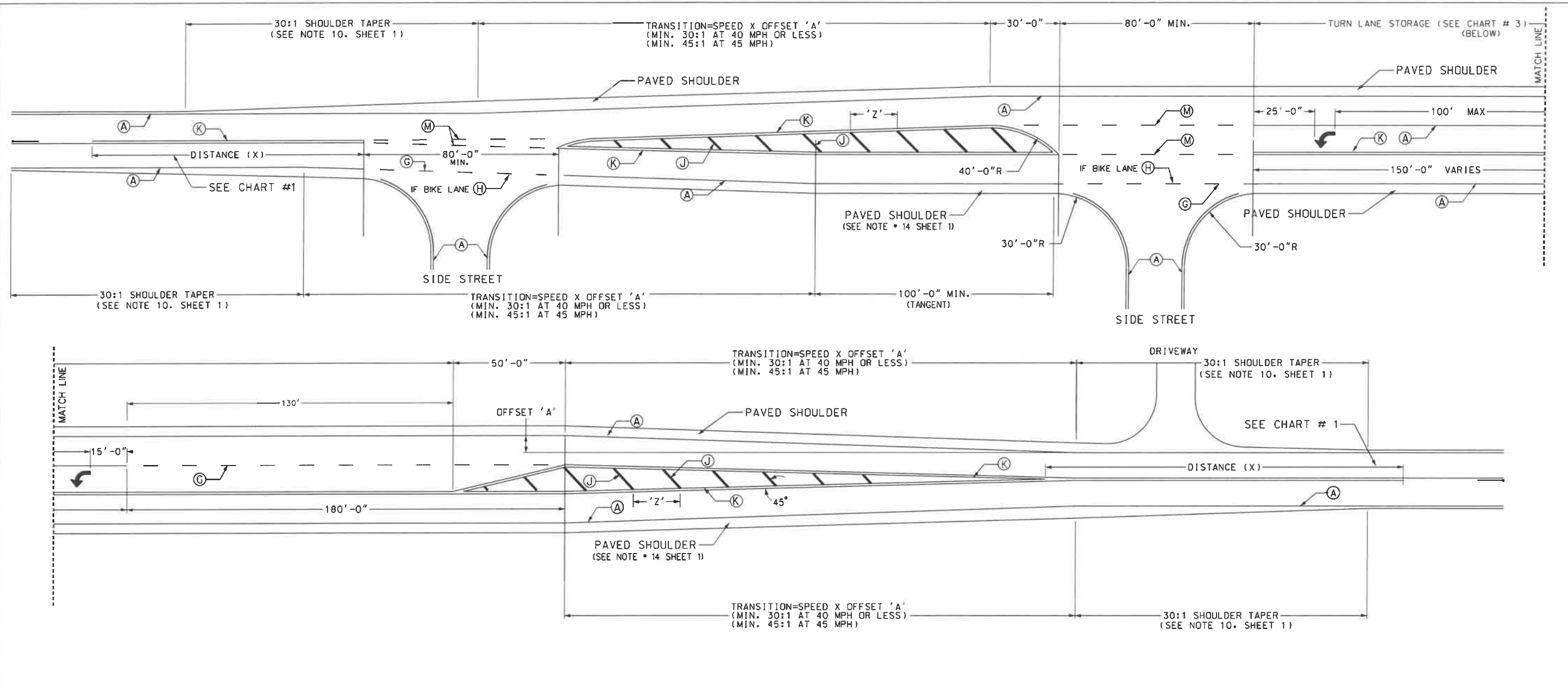
MOTASEM AL-TURK  
DIRECTOR - TRAFFIC DIVISION

NAME	DATE	SCALE	CONTRACT NO.
EL	08/30/16	N.T.S	

DRAWN BY	CHECKED BY	DRAWING	T-P-21

NO.	DATE	REVISIONS	BY	APP.

SHEET 2 OF 12 SHEETS



**CHART #1**  
LENGTHS OF APPROACH STRIPING (FT.)

ALL PAVEMENT MARKING & R.P.M.'S SHALL BE REDONE OR BROUGHT UP TO PRESENT STANDARDS.

SPEED	DISTANCE (X) (FT.)
30	500
35	550
40	600
45	700
50	800

**CHART #3**  
SINGLE TURN LANE STORAGE (MIN. - FT.)

MPH	TURNING VEHICLES PER HOUR										
	30-60	61-90	91-120	121-150	151-180	181-210	211-240	241-270	271-300	>301	
55	365	390	415	440	465	490	515	540	565	590	
50	300	325	350	375	400	425	450	475	500	525	
45	280	280	295	320	345	370	395	420	445	470	
40	280	280	280	280	285	310	335	360	385	410	
35	280	280	280	280	280	290	315	340	365	390	

- NOTES:**
1. STORAGES SHOWN ARE MINIMUMS IN FEET, EXCLUDING 50' SHADOW.
  2. APPLIES TO RIGHT OR LEFT TURN LANES, SIGNALIZED OR UNSIGNALIZED.
  3. ENTRY SPEED ASSUMED TO BE 5 MPH LESS THAN SPEED LIMIT; STORAGE LENGTHS CALCULATED UTILIZING FLORIDA DESIGN MANUAL SECTION 212.
  4. ASSUMES UNIFORM ARRIVALS WITH TOTAL QUEUE DISPERSAL EVERY 2 MINUTES.
  5. 6' - 10' WHITE SKIP LINE LENGTH - 180'.
  6. USE OF SINGLE LEFT TURN LANE FOR VOLUMES IN EXCESS OF 250 REQUIRES APPROVAL FROM THE DIRECTOR OF TRAFFIC ENGINEERING.

**STRIPING KEY**

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- B = 8" SOLID WHITE
- C = 12" SOLID WHITE
- D = 18" SOLID WHITE
- E = 24" SOLID WHITE
- F = 6" SKIP WHITE TYP (10'-30')
- G = 6" SKIP WHITE TYP (6'-10')
- H = 6" SKIP WHITE TYP (2'-4')
- I = 6" SOLID YELLOW
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- K = 6" DOUBLE YELLOW
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**CHART #2**  
DISTANCE BETWEEN CROSS HATCHED LINES

POSTED SPEED LIMIT (M.P.H.)	DISTANCE (Z) (FT.)
≤ 30	10
≤ 40	20
45	30
≥ 50	40

**CHART #4**  
DUAL TURN LANE STORAGE (MIN. - FT.)

MPH	TURNING VEHICLES PER HOUR							
	< 240	241-300	301-360	361-420	421-480	481-540	>541	
55	490	515	540	565	590	615	665	
50	450	450	475	500	525	550	600	
45	450	450	450	450	470	495	545	
40	450	450	450	450	450	450	485	
35	450	450	450	450	450	450	465	

- NOTES:**
1. STORAGES SHOWN ARE MINIMUMS IN FEET, EXCLUDING 100' SHADOW.
  2. APPLIES TO RIGHT OR LEFT TURN LANES.
  3. ENTRY SPEED ASSUMED TO BE 5 MPH LESS THAN SPEED LIMIT; STORAGE LENGTHS CALCULATED UTILIZING FLORIDA DESIGN MANUAL SECTION 212.
  4. ASSUMES UNIFORM ARRIVALS WITH TOTAL QUEUE DISPERSAL EVERY 2 MINUTES, AT 95% LEVEL OF CONFIDENCE.
  5. ASSUMES 50% - 50% LANE DISTRIBUTION.
  6. 6' - 10' WHITE SKIP LINE LENGTH - 250'.

NO.	DATE	REVISIONS	BY	APP.

PALM BEACH COUNTY, FLORIDA  
**TRAFFIC DIVISION**

TYPICAL  
TURN LANE GEOMETRICS  
AND APPROACH STRIPING

3/13/21

BOGDAN PIORKOWSKI  
SENIOR PROFESSIONAL ENGINEER

MOTASEM AL-TURK  
DIRECTOR - TRAFFIC DIVISION

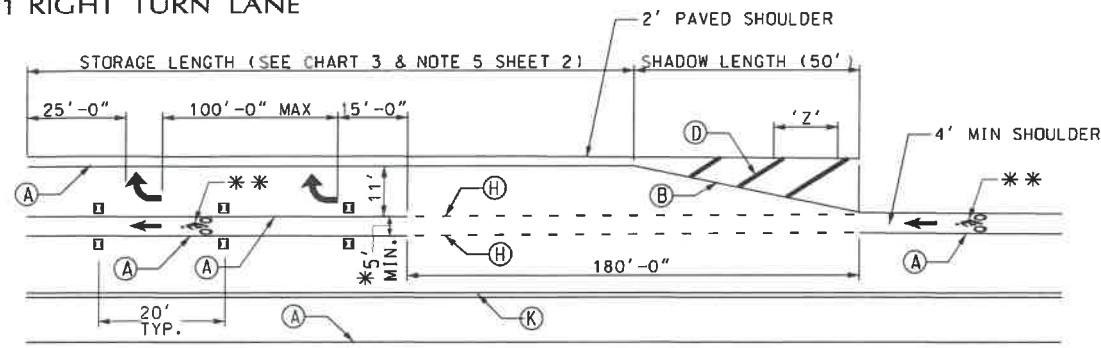
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CHECKED BY: [Signature]

DRAWING: T-P-21

SHEET 3 OF 12 SHEETS

#1 RIGHT TURN LANE

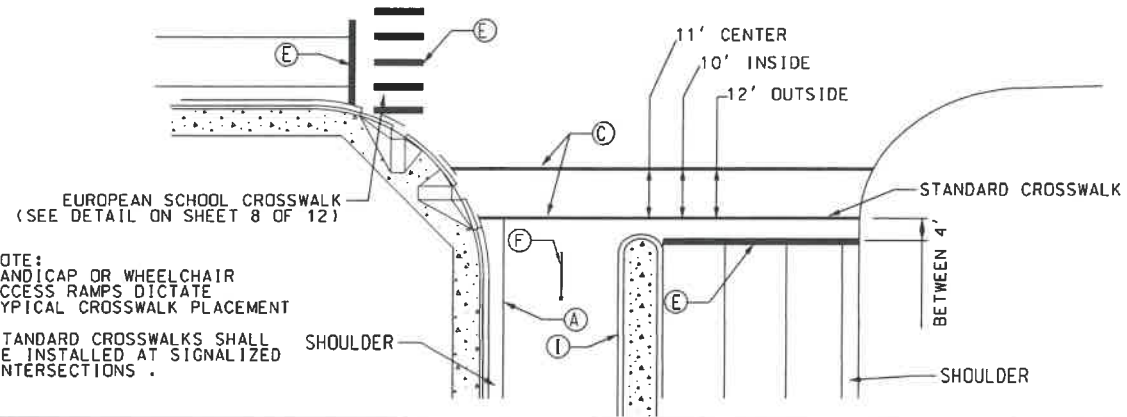


\*IF 5' MIN NOT PROVIDED MOVE SHOULDER TO RIGHT TURN LANE.

\*\*BIKELANE MARKINGS ONLY AT APPROACH TO SIGNALIZED INTERSECTION

FOR DISTANCE 'Z' SEE CHART 2 ON SHEET 2.

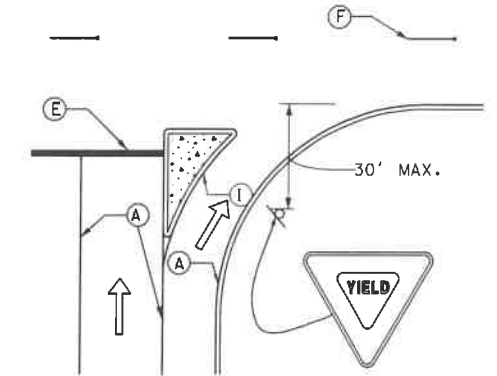
#2 EUROPEAN CROSSWALK & STOP BAR PLACEMENT



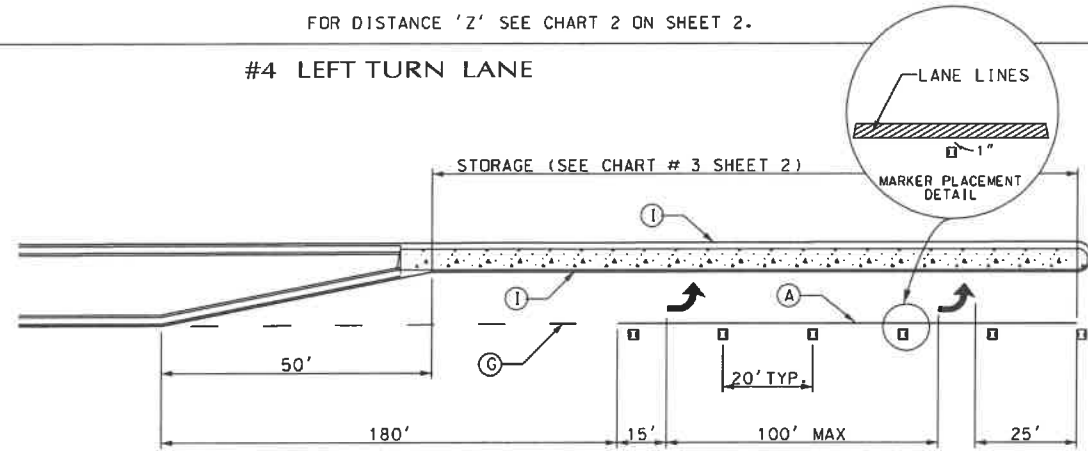
NOTE: HANDICAP OR WHEELCHAIR ACCESS RAMP DICTATE TYPICAL CROSSWALK PLACEMENT

STANDARD CROSSWALKS SHALL BE INSTALLED AT SIGNALIZED INTERSECTIONS.

#3 YIELD SIGN PLACEMENT

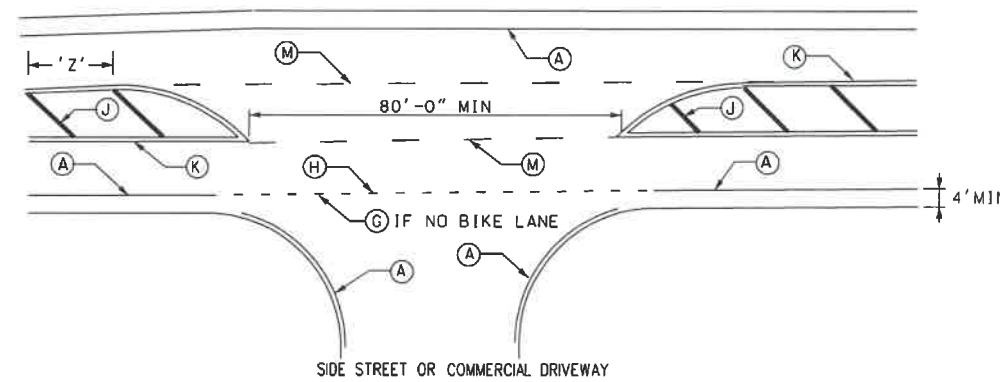


#4 LEFT TURN LANE

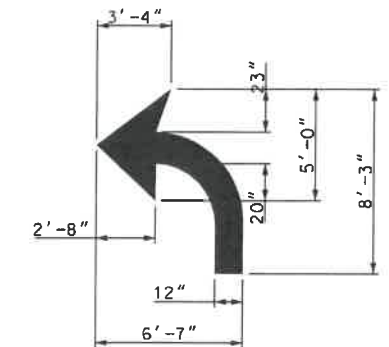


Shadow length's shall be 100 feet at all dual left applications, with 250' of 6'-10' skips.

#5 TAPER ACROSS SIDE STREET OR MAJOR DRIVEWAY

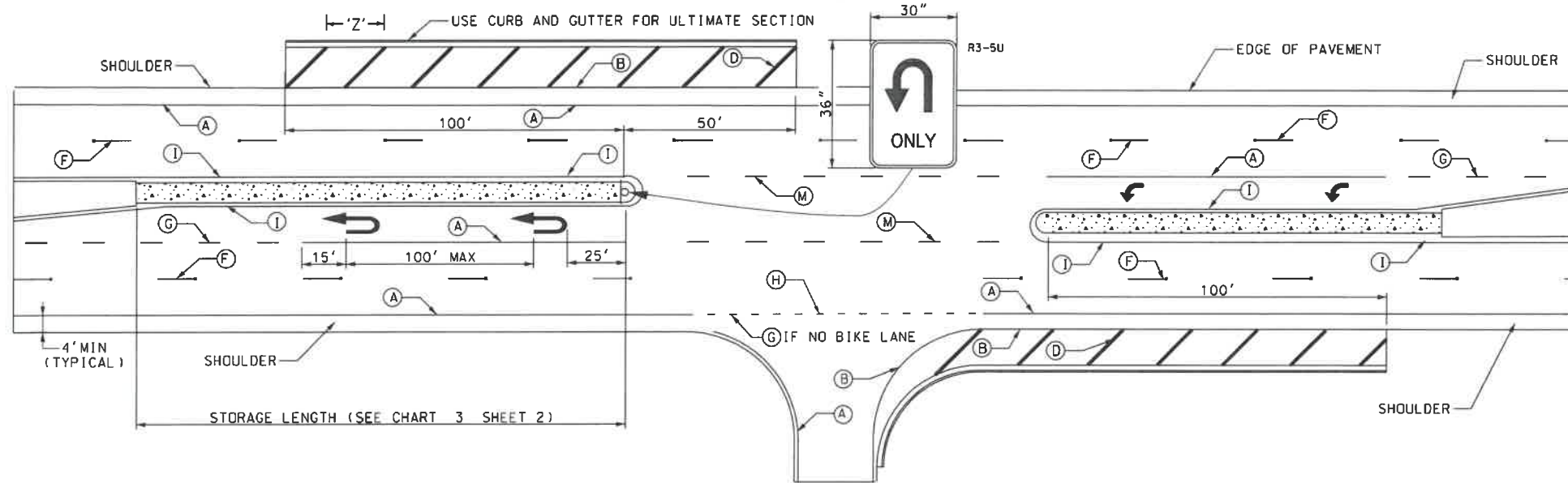


#6 TYPICAL TURN LANE ARROW



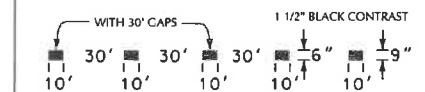
100 FT MAXIMUM DISTANCE BETWEEN ARROWS LEFT AND RIGHT TURN LANES

#7 "U-TURN" TYPICAL DETAIL. FOR U-TURN DIMENSIONS ON ULTIMATE 4 LANE DIVIDED ROADWAY



#8 CONTRAST MARKINGS

10' WHITE SKIP WITH BLACK CONTRAST.

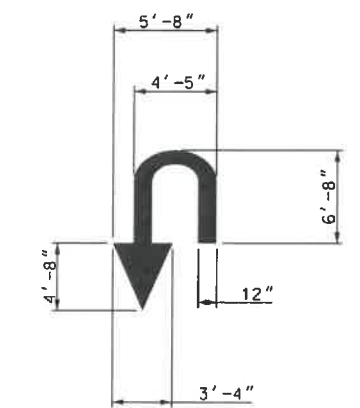


CONTRAST MARKINGS SHALL BE USED FOR SKIP MARKING ON CONCRETE OR AS DIRECTED BY THE COUNTY ENGINEER.

STRIPING KEY

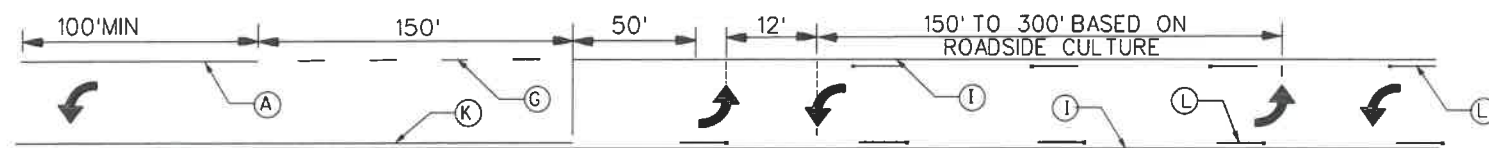
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- U = RPM BI-DIRECTIONAL RED/YELLOW

#9 TYPICAL U-TURN ARROW



100 FT MAXIMUM DISTANCE BETWEEN ARROWS U-TURN LANES

#10 TWO WAY LEFT TURN LANE (SCHEME ONE)



PALM BEACH COUNTY, FLORIDA  
TRAFFIC DIVISION

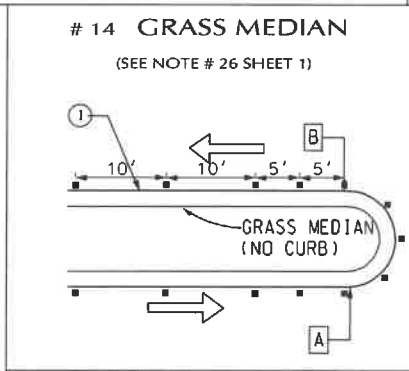
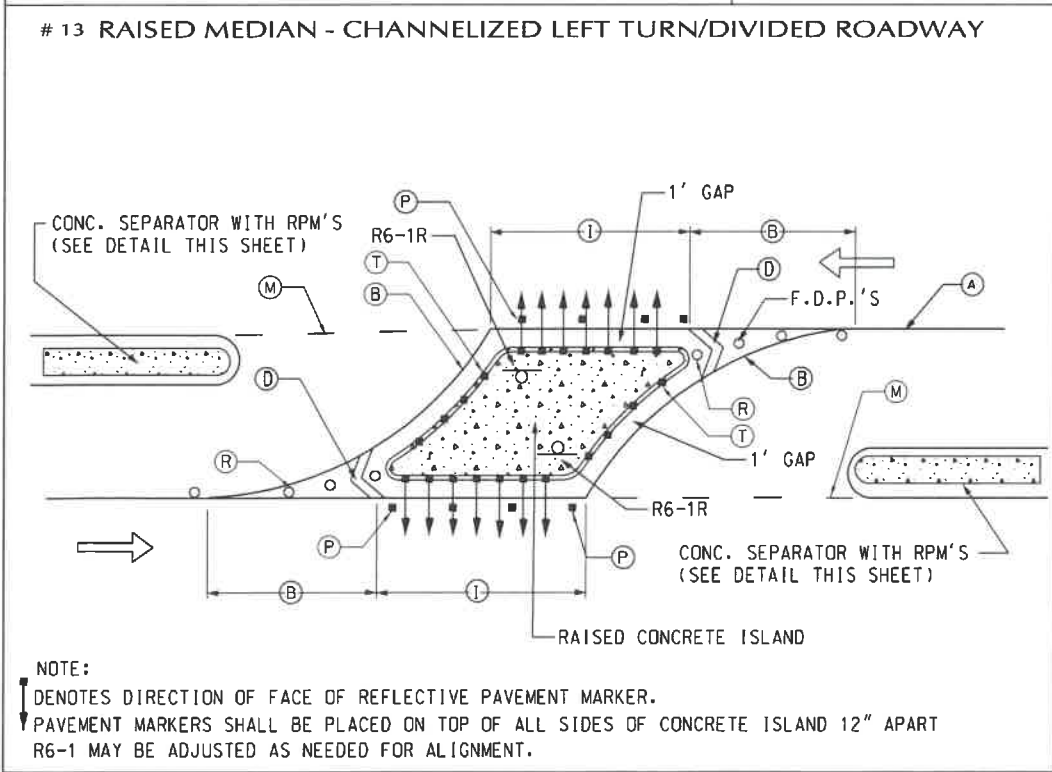
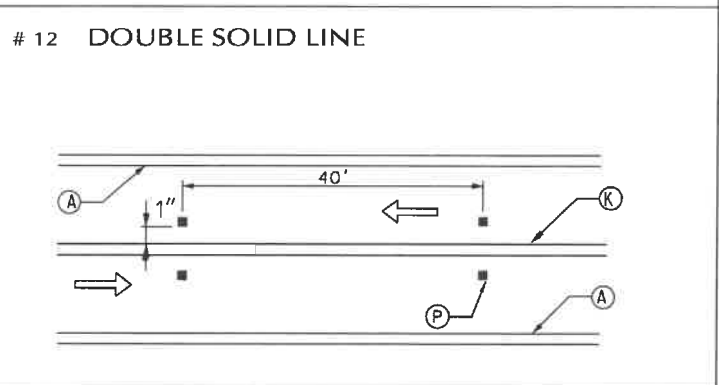
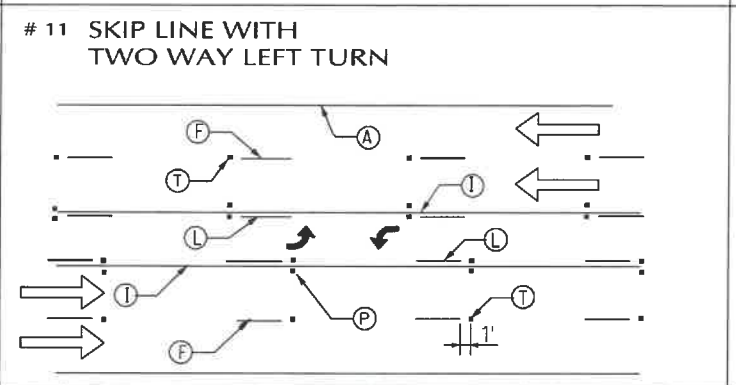
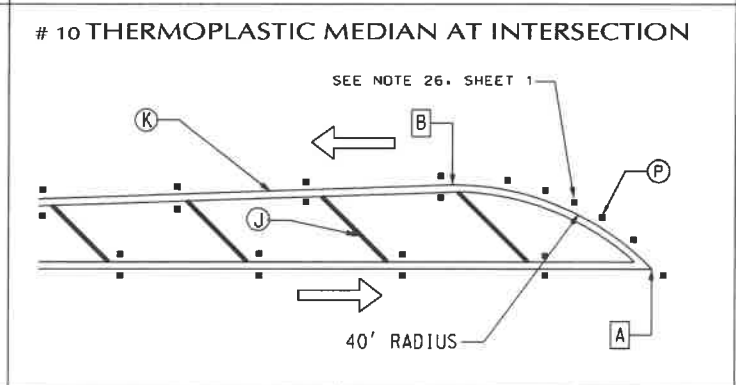
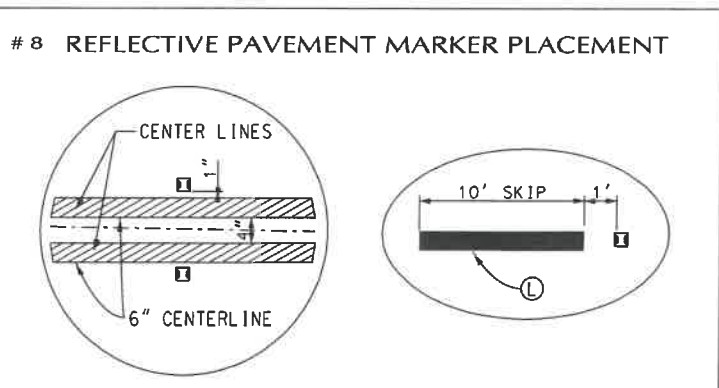
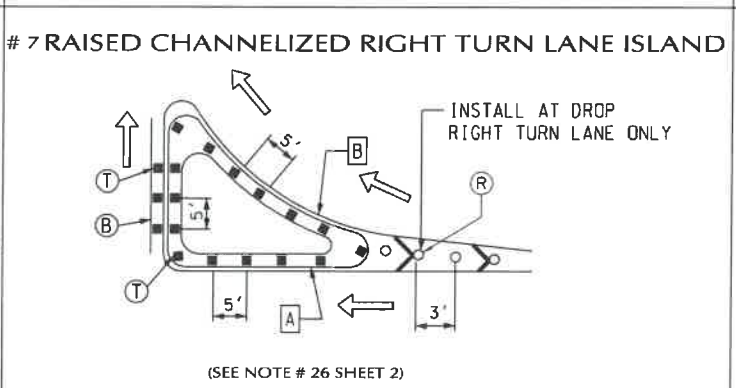
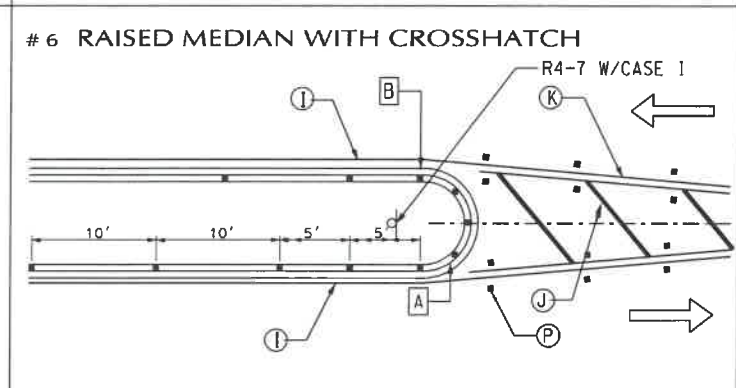
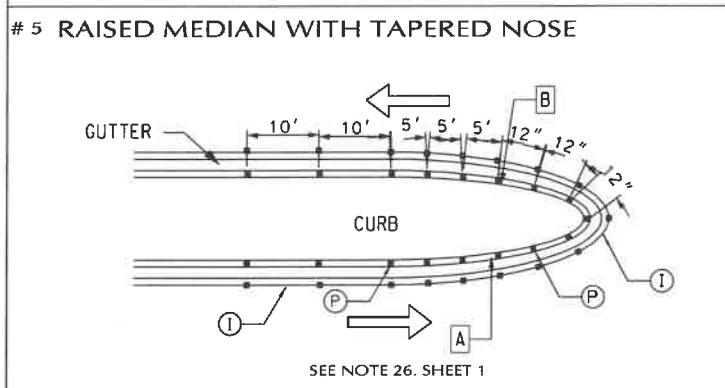
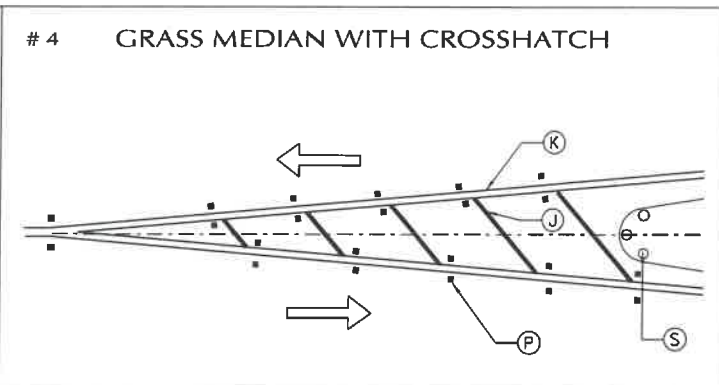
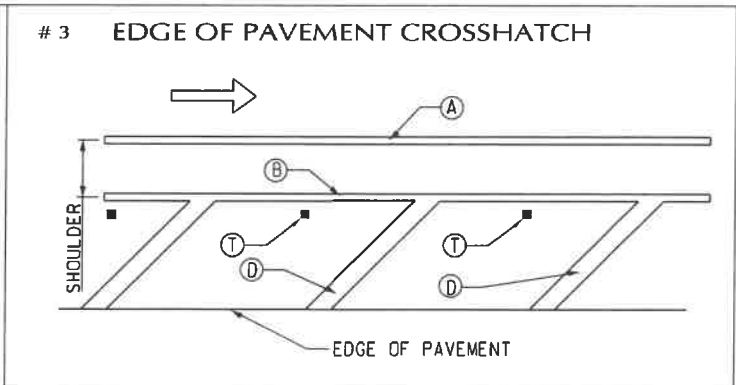
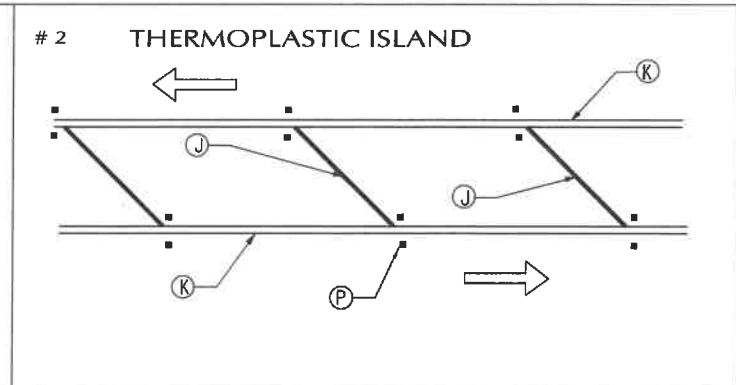
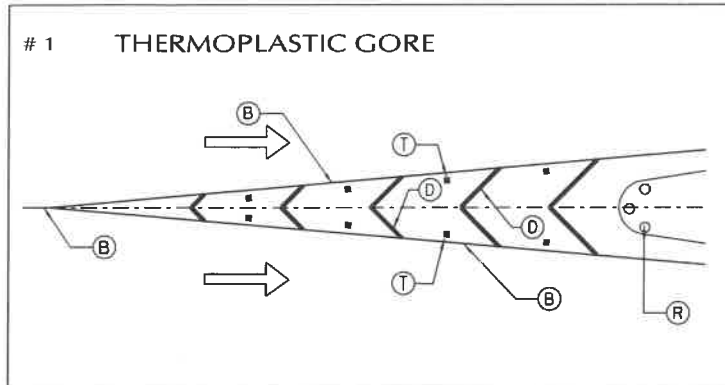
TYPICAL

OTHER LANE DETAILS

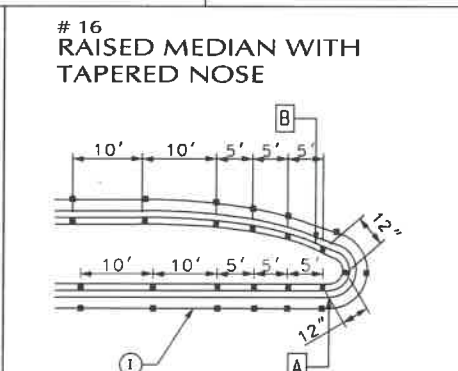
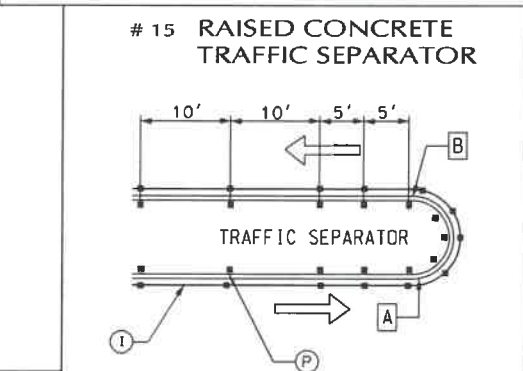
WITH PAVED SHOULDER

BOGDAN T. PIORKOWSKI SENIOR PROFESSIONAL ENGINEER		MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION	
NAME	DATE	SCALE	CONTRACT NO.
CGT	4-16-2010	N.T.S.	
DRAWN BY		DRAWING	T-P-21
TRACED BY			
CHECKED BY			

NO.	DATE	REVISIONS	BY	APP.
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- STRIPING KEY
- A = 6" SOLID WHITE
  - B = 8" SOLID WHITE
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  - D = 18" SOLID WHITE
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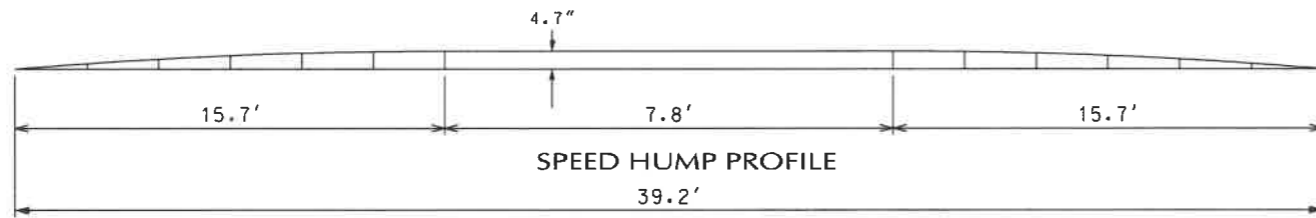


# 17 LEFT FOR FUTURE USE

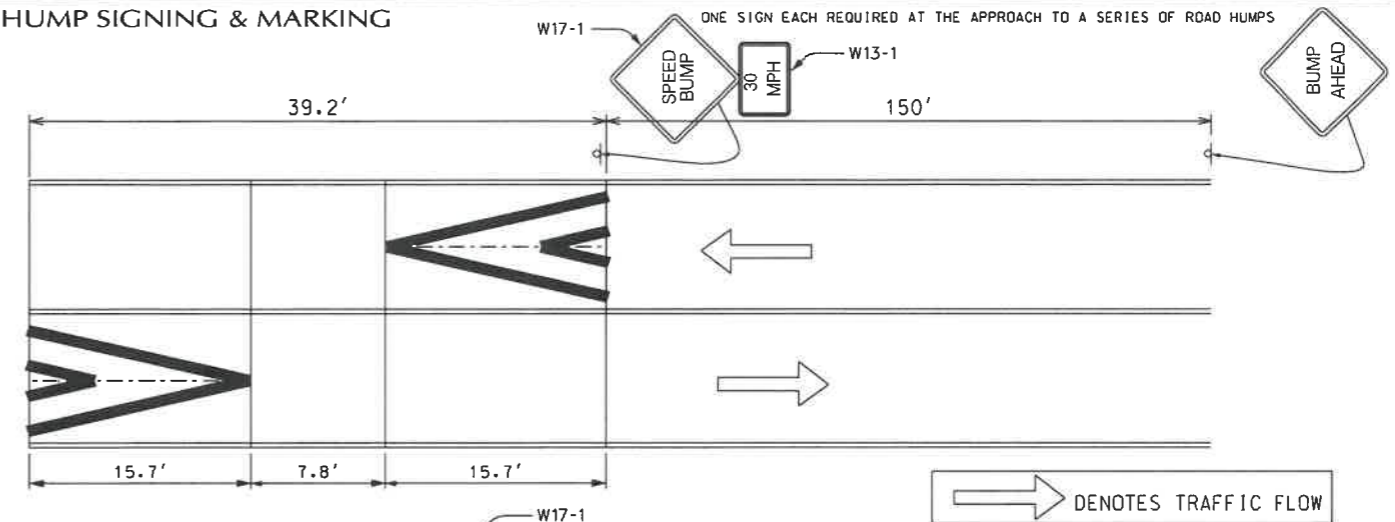


PALM BEACH COUNTY, FLORIDA			
TRAFFIC DIVISION			
TYPICAL			
REFLECTIVE PAVEMENT MARKER PLACEMENT DETAILS			
BOGDAN T. PIORKOWSKI SENIOR PROFESSIONAL ENGINEER		MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION	
NAME	DATE	SCALE	CONTRACT NO.
EL	08/30/16	N.T.S.	
DRAWN BY		DRAWING	T-P-21
TRACED BY			
CHECKED BY			
NO.	DATE	REVISIONS	BY APP.
SHEET 5		OF 12 SHEETS	

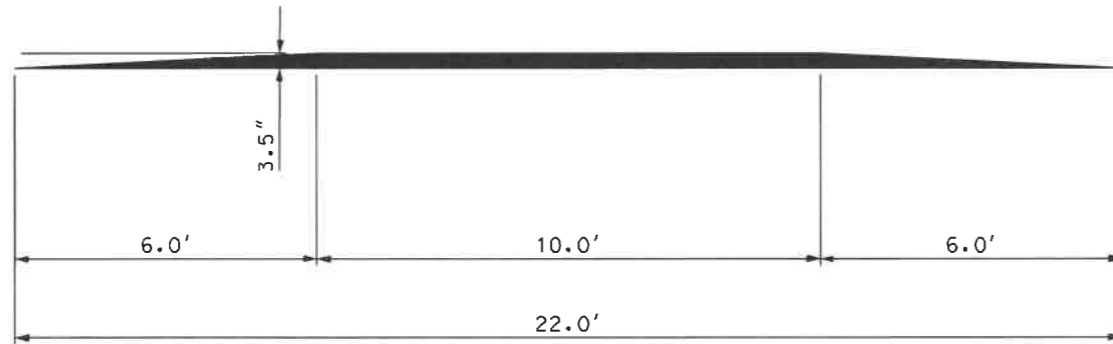
### SPEED HUMP (DUTCH DESIGN)



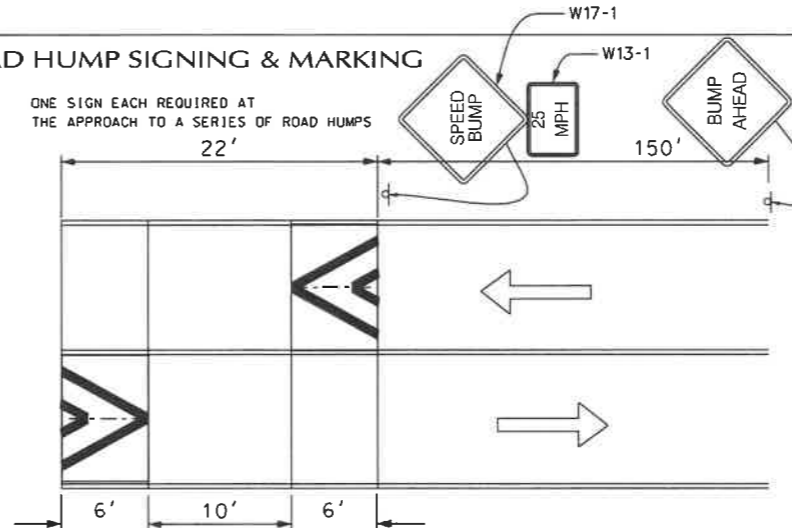
### ROAD HUMP SIGNING & MARKING



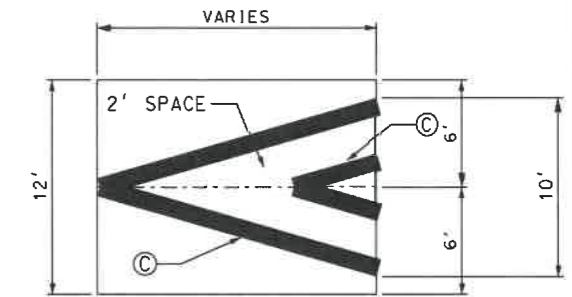
### SEMINOLE SPEED HUMP



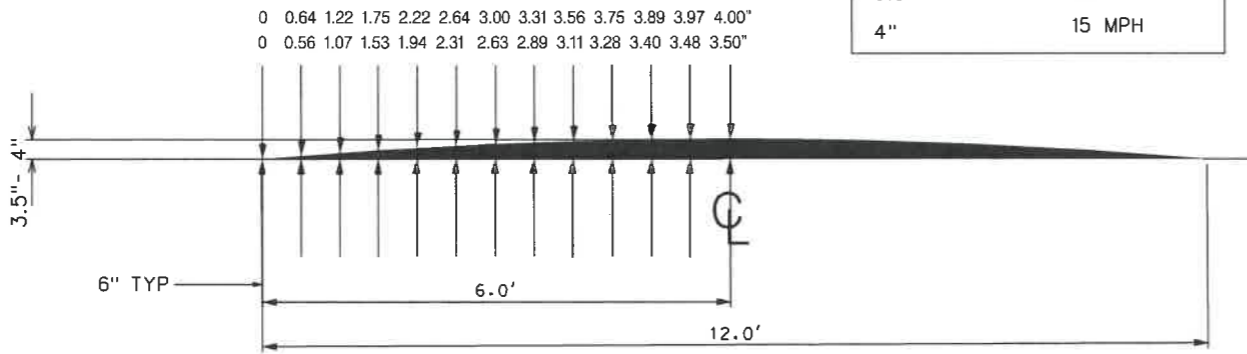
### ROAD HUMP SIGNING & MARKING



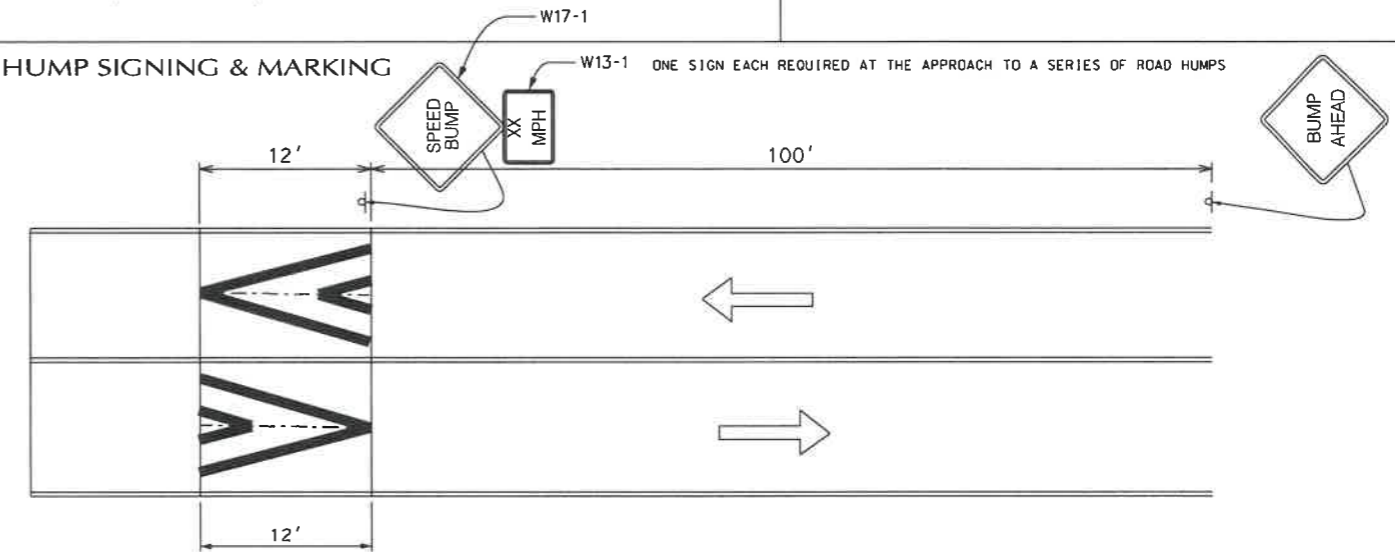
### ROAD HUMP PAVEMENT MARKINGS



### I.T.E. SPEED HUMP ONLY APPLICABLE TO PRIVATE ROADS WITHIN UNINCORPORATED PALM BEACH COUNTY



### ROAD HUMP SIGNING & MARKING



#### COORDINATION WITH STREET GEOMETRY

A THOROUGH ON-SITE ANALYSIS OF ROADWAY GEOMETRICS SHALL BE PERFORMED TO ENSURE THAT SPEED HUMPS WILL NOT BE INTRODUCED AT A CRITICAL POINT IN THE ROADWAY SYSTEM. E.G. A SEVERE COMBINATION OF HORIZONTAL, VERTICAL CURVATURE AND / OR STREET GRADIENT.

#### COORDINATION WITH TRAFFIC OPERATIONS

SPEED HUMPS SHOULD NOT BE INSTALLED WITHIN 400' FT. OF A TRAFFIC SIGNAL OR WITHIN 150' FROM AN INTERSECTION OR STOP SIGN. MINIMUM DISTANCE BETWEEN SPEED HUMPS IS 400' AND THE MAXIMUM SHOULD BE 800'. TO BE CONSTRUCTED ONLY WHEN APPROVED BY PALM BEACH COUNTY ENGINEER.

#### CONSTRUCTION PROCEDURES

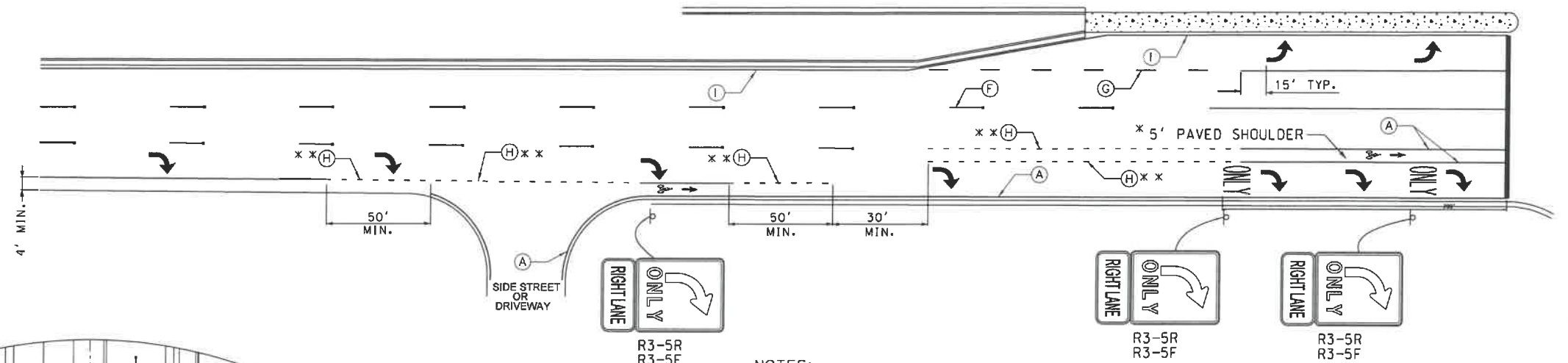
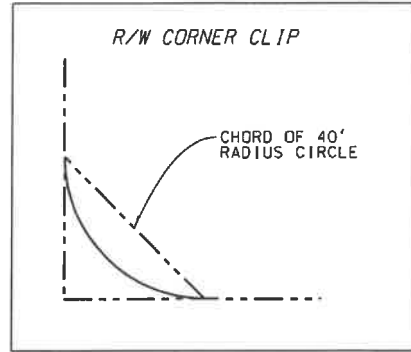
IT IS RECOMMENDED THAT A TEMPLATE BE CONSTRUCTED TO VERIFY THE ACCURACY OF THE HUMP PROFILE AND TO ENSURE THAT THE DESIRED VERTICAL DIMENSIONS ARE ATTAINED WITHIN REASONABLE TOLERANCES (NORMALLY ONE-HALF INCH OR LESS, PROVIDED THE HUMP DOES NOT EXCEED 4 INCHES). IF THE PROFILE IS INCORRECT, HUMP CHARACTERISTICS WILL BE CHANGED THAT MIGHT IMPACT TRAFFIC SAFETY OR CREATE INEFFECTIVE SPEED CONTROL.

IT IS RECOMMENDED THAT THE ROAD SURFACE BE EXCAVATED AT TAPERING EDGES TO PREVENT SPALLING. HUMPS MAY BE INSTALLED IN TWO LIFTS TO IMPROVE ACCURACY AND SHAPE.



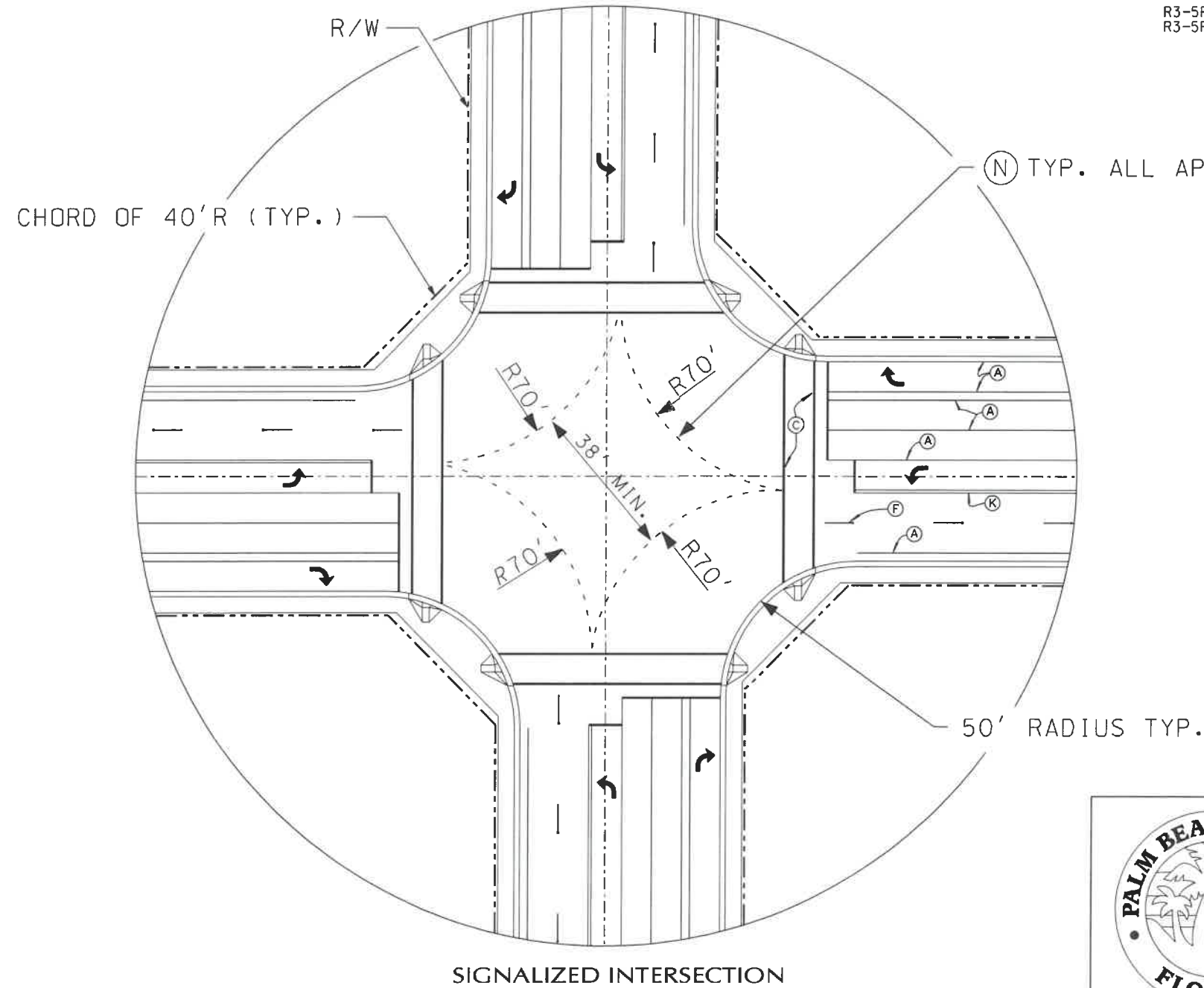
1		07/07/21	ADDED I.T.E SPEED HUMP AND NOTE CHANGE.	EL
PALM BEACH COUNTY, FLORIDA <b>TRAFFIC DIVISION</b> TYPICAL <b>ROAD SPEED HUMP DETAILS</b> BOGDAN T. PIOTROWSKI SENIOR PROFESSIONAL ENGINEER MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION N.T.S. SCALE DRAWN BY: CGT DATE: 4-16-2010 TRACED BY: DRAWING: T-P-21 CHECKED BY: SHEET 6 OF 12 SHEETS				

PAVED SHOULDER RIGHT TURN DROP LANE



NOTES:

- \* SEE ROADWAY PRODUCTION THROUGHFARE ROADS TYPICAL SECTION FOR SHOULDER OR BIKE LANE WIDTH.
- \*\* USE (C) IF NO BIKE LANE



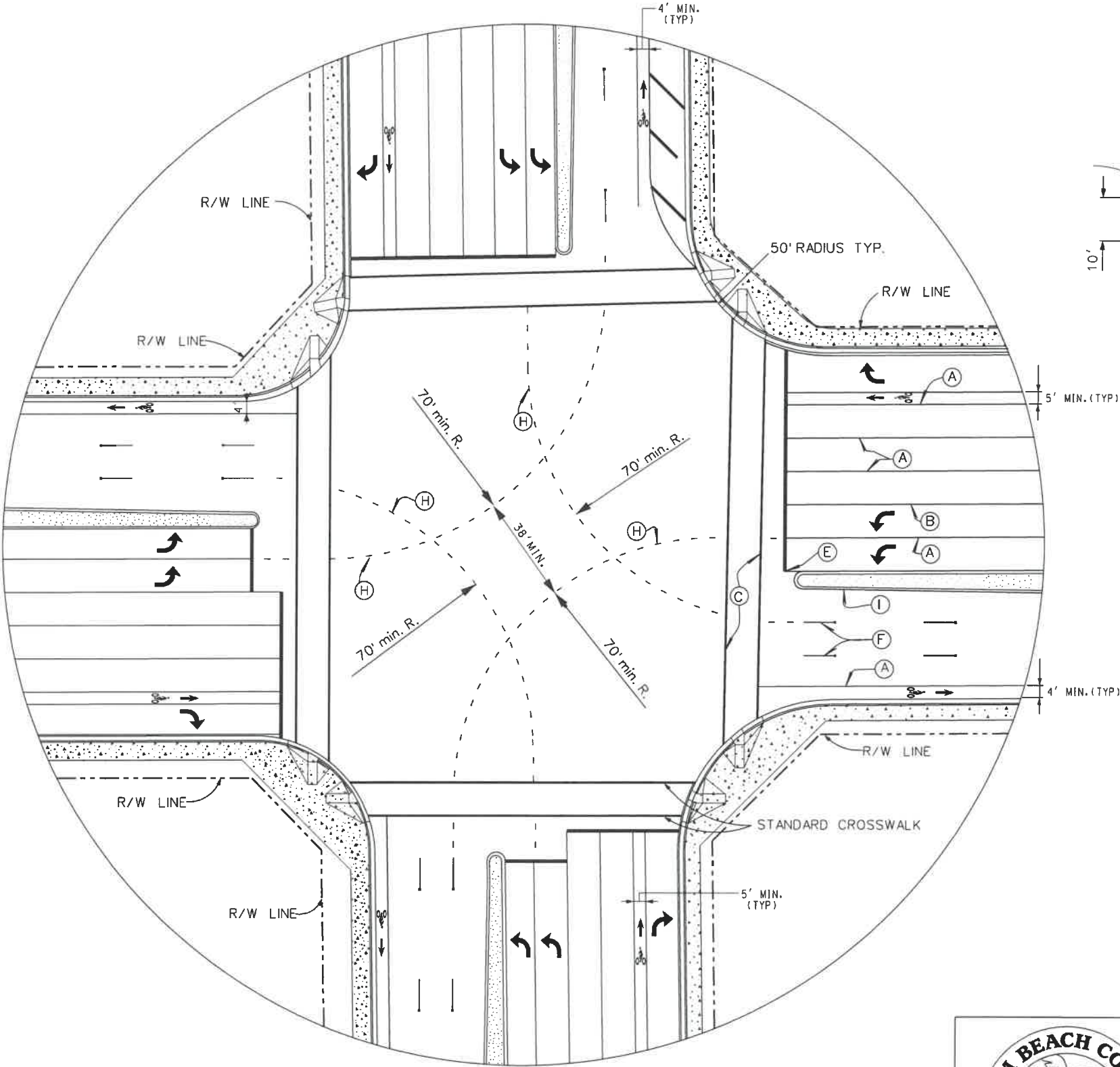
NOTES:

1. FOR EXACT CROSSWALK PLACEMENT PLEASE SEE DETAIL 2 ON SHEET 4 OF THIS TYPICAL.
2. FOR BIKE LANE MARKING AT INTERSECTION SEE SHEET 8

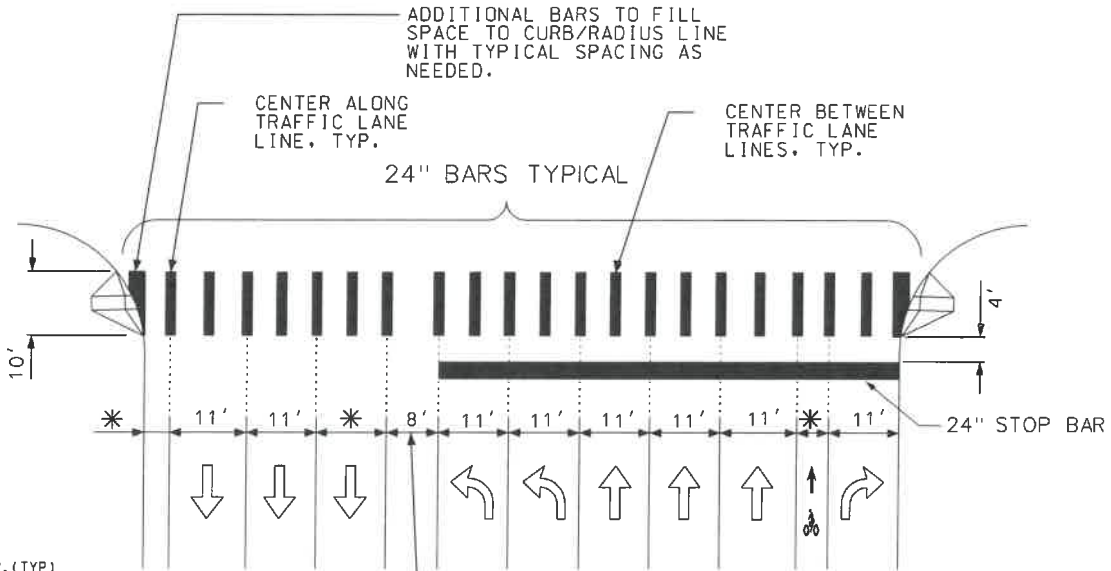


PALM BEACH COUNTY, FLORIDA			
TRAFFIC DIVISION			
TYPICAL			
3/13/21 SINGLE TURN LANE INTERSECTION; DROP TURN LANE			
BOGDAN T. PIORKOWSKI SENIOR PROFESSIONAL ENGINEER		MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION	
NAME	DATE	SCALE	CONTRACT NO.
		N. T. S.	
DRAWN BY		DRAWING	
TRACED BY		T-P-21	
CHECKED BY		SHEET 7 OF 12 SHEETS	

EUROPEAN SCHOOL CROSSWALK (IF SPECIFIED)



SIGNALIZED INTERSECTION



ADD BARS AT TYPICAL SPACING FOR WIDTHS GREATER THAN 8'.

\* VARIES - USE ROADWAY PRODUCTION THOROUGHFARE ROADS TYPICAL SECTION FOR DETAIL. 5' MIN. FOR BIKE LANE WIDTH.



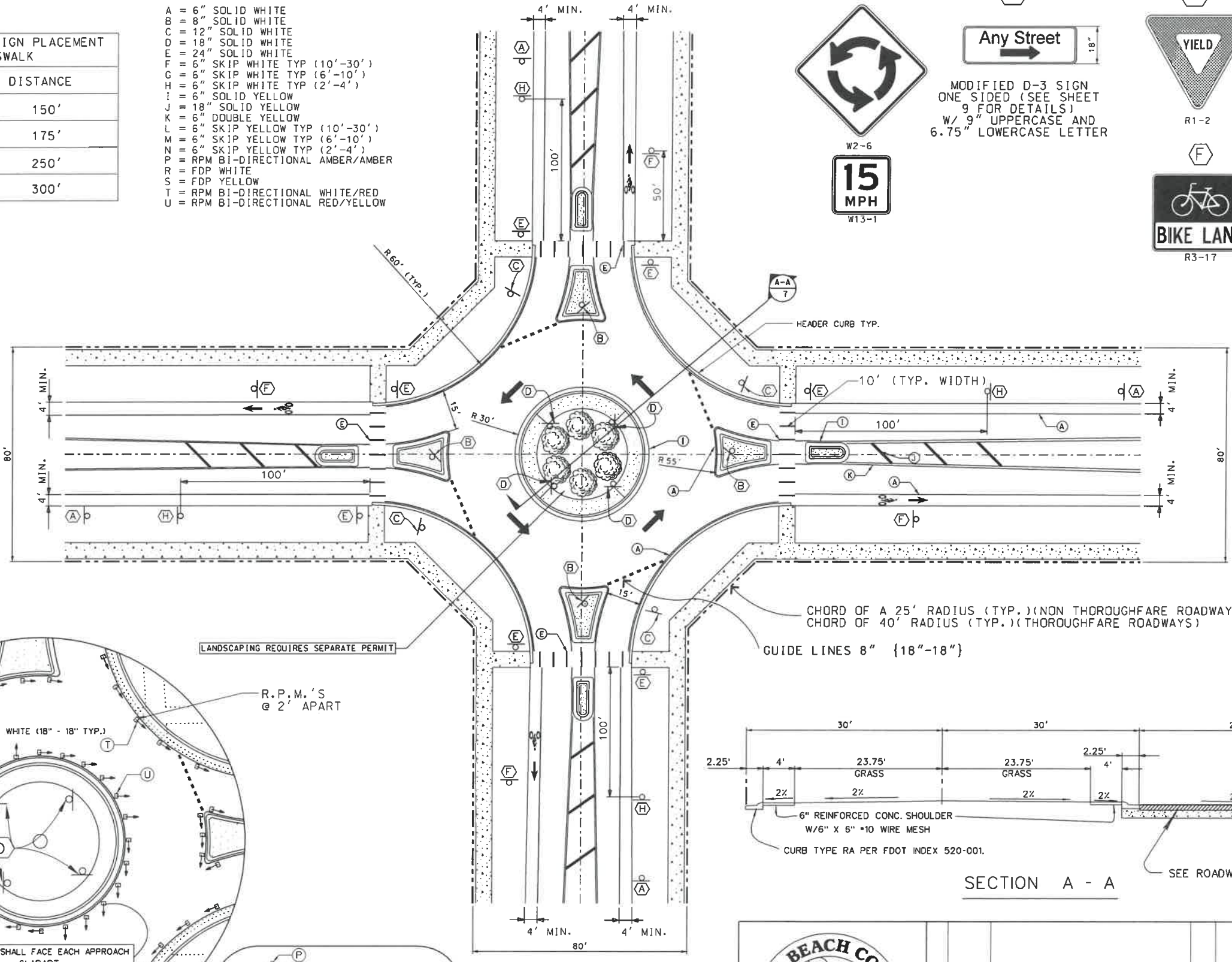
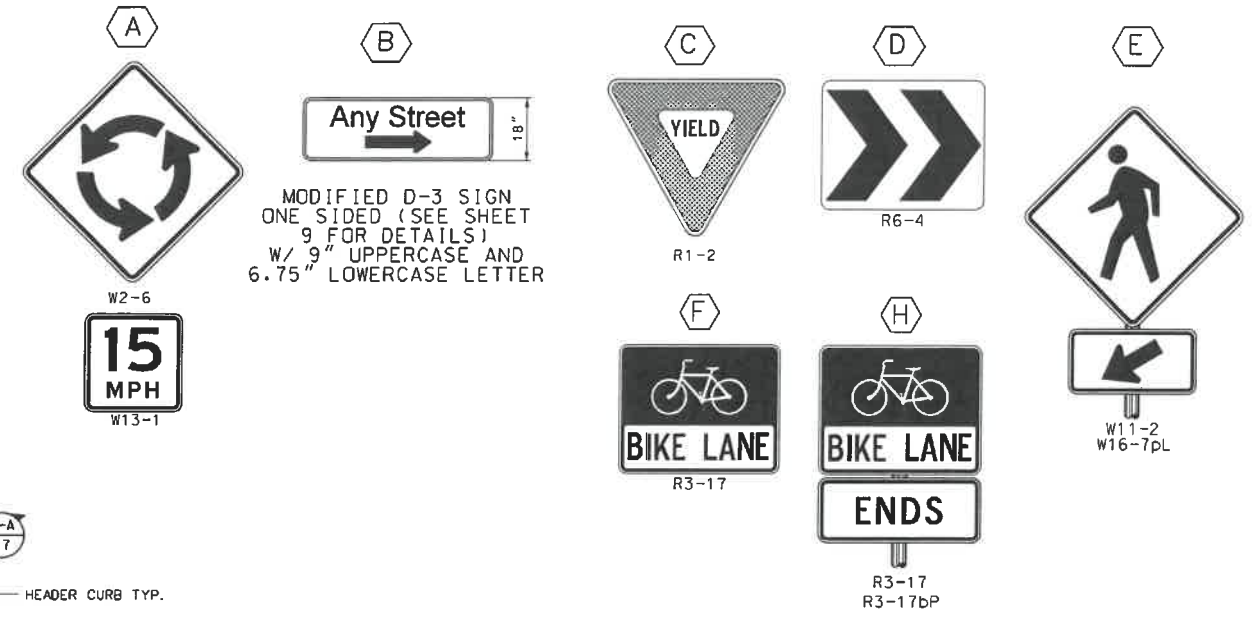
PALM BEACH COUNTY, FLORIDA			
TRAFFIC DIVISION			
TYPICAL			
EXPANDED SIGNALIZED INTERSECTION			
EUROPEAN SCHOOL CROSSWALK			
BOGDAN T. PIORKOWSKI SENIOR PROFESSIONAL ENGINEER		MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION	
NAME	DATE	SCALE	CONTRACT NO.
EL	11/04/16	N.T.S.	
DRAWN BY		DRAWING	T-P-21
TRACED BY			
CHECKED BY			
NO.	DATE	REVISIONS	BY APP.
			SHEET 8 OF 12 SHEETS



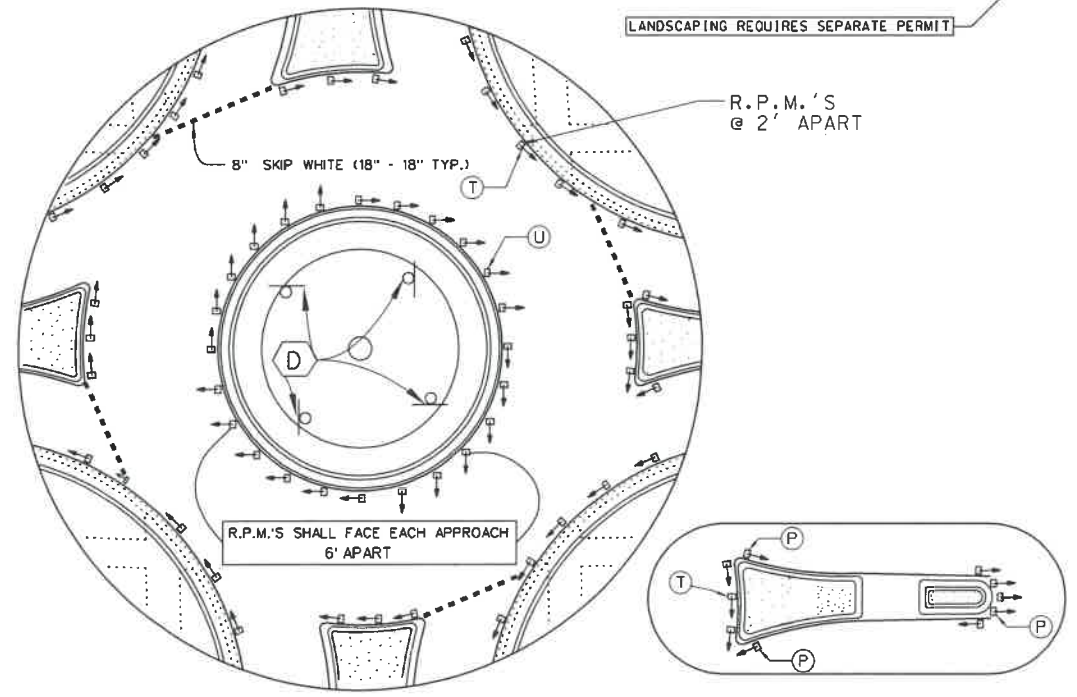
**ADVANCE WARNING SIGN PLACEMENT TO CROSSWALK**

SPEED	DISTANCE
30	150'
35	175'
40	250'
45	300'

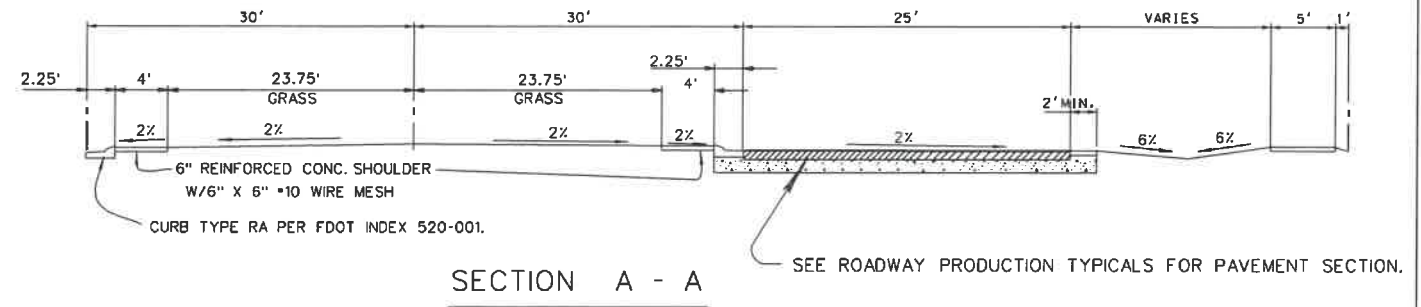
- STRIPING KEY**
- A = 6" SOLID WHITE
  - B = 8" SOLID WHITE
  - C = 12" SOLID WHITE
  - D = 18" SOLID WHITE
  - E = 24" SOLID WHITE
  - F = 6" SKIP WHITE TYP (10'-30')
  - G = 6" SKIP WHITE TYP (6'-10')
  - H = 6" SKIP WHITE TYP (2'-4')
  - I = 6" SOLID YELLOW
  - J = 18" SOLID YELLOW
  - K = 6" DOUBLE YELLOW
  - L = 6" SKIP YELLOW TYP (10'-30')
  - M = 6" SKIP YELLOW TYP (6'-10')
  - N = 6" SKIP YELLOW TYP (2'-4')
  - P = RPM BI-DIRECTIONAL AMBER/AMBER
  - R = FDP WHITE
  - S = FDP YELLOW
  - T = RPM BI-DIRECTIONAL WHITE/RED
  - U = RPM BI-DIRECTIONAL RED/YELLOW



- NOTES:**
1. ALL PAVEMENT MARKINGS AND REFLECTIVE PAVEMENT MARKERS SHALL BE IN ACCORDANCE WITH PALM BEACH COUNTY TYPICAL DRAWING NO. T-P-21
  2. ROUNDABOUT RADII OF LESSER DIMENSIONS MAY BE ACCEPTED INSIDE SUBDIVISIONS AS APPROVED BY THE TRAFFIC DIVISION. ROUNDABOUTS SHALL ACCOMMODATE THE PASSAGE OF EMERGENCY VEHICLES. NO CALL BOXES, CARD READERS, OR GATES SHALL BE INSTALLED ON ROUNDABOUTS.
  3. SEE FLORIDA GREEN BOOK FOR LIGHTING GUIDELINES. APPROVAL BY PALM BEACH COUNTY TRAFFIC ENGINEER IS REQUIRED PRIOR TO INSTALLATION. ILLUMINATION SHALL BE IN PLACE PRIOR TO OPENING OF THE ROUNDABOUT TO MOTORISTS.
  4. FOR NEW ROUNDABOUT CONSTRUCT BICYCLE RAMP PER FLORIDA DESIGN MANUAL FIGURE 213.8.1 OR FIGURE 213.8.2



**R.P.M. PLACEMENT DETAILS**



**SECTION A - A**



PALM BEACH COUNTY, FLORIDA  
**TRAFFIC DIVISION**  
 TYPICAL  
**ROUNDABOUT**  
 INTERSECTION OF TWO 80' RIGHTS-OF-WAY

3/13/17

ELIOTT MORROW  
 SENIOR PROFESSIONAL ENGINEER

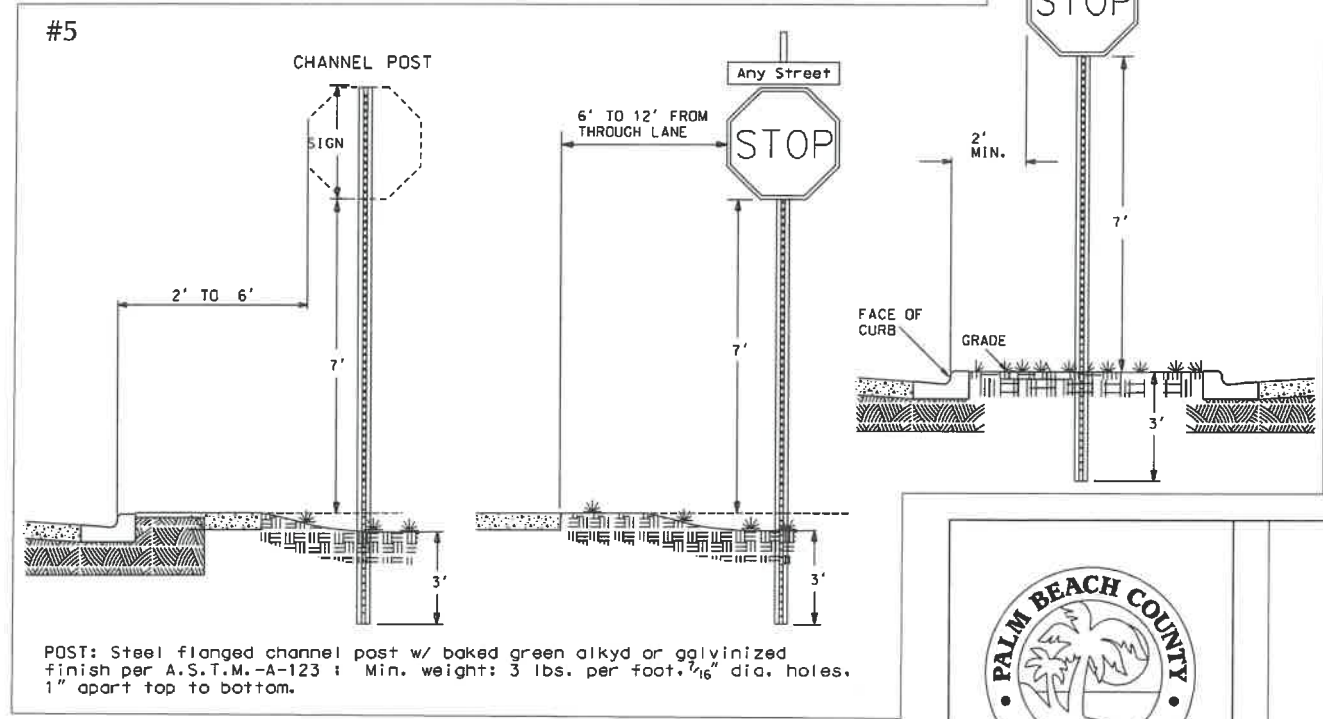
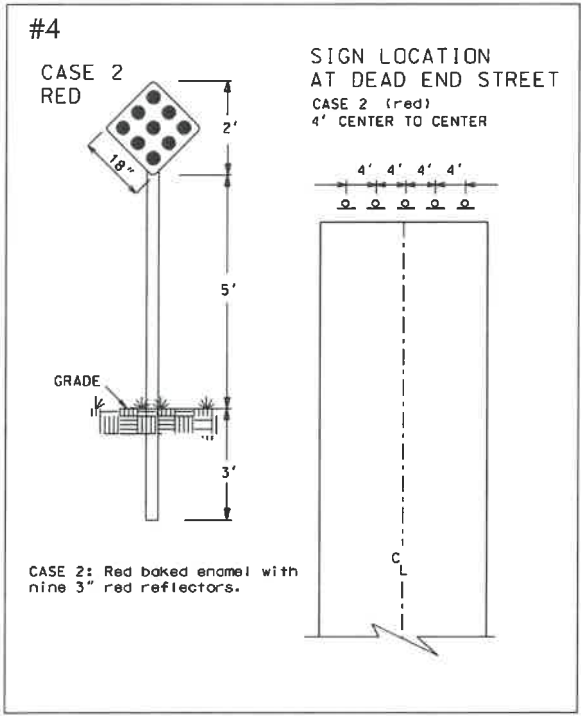
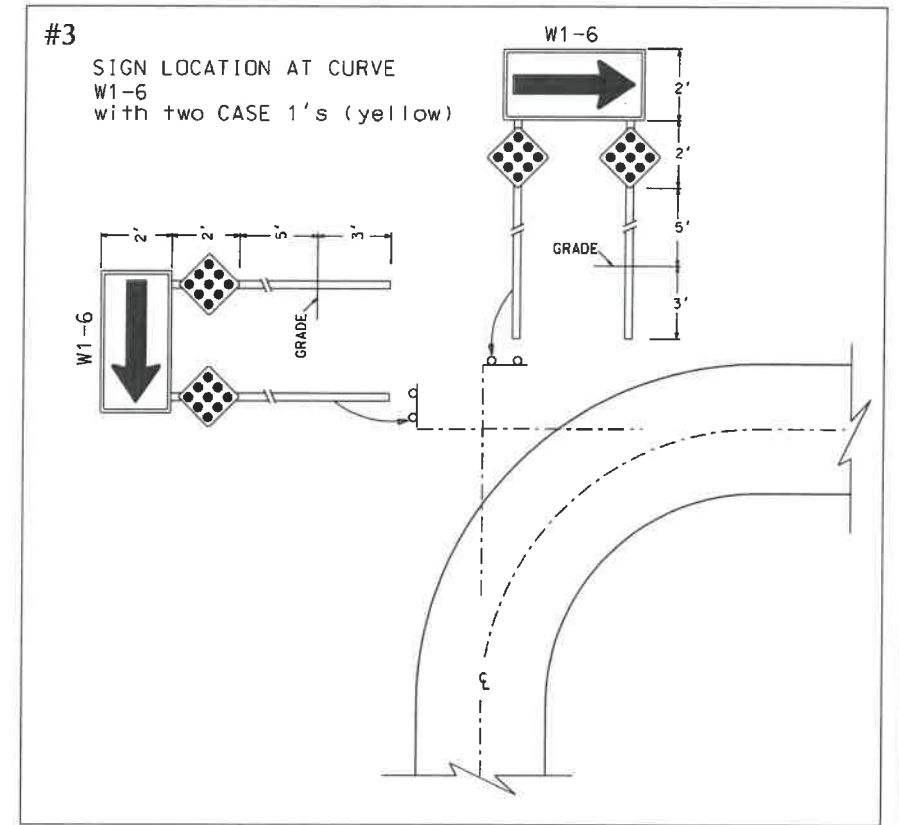
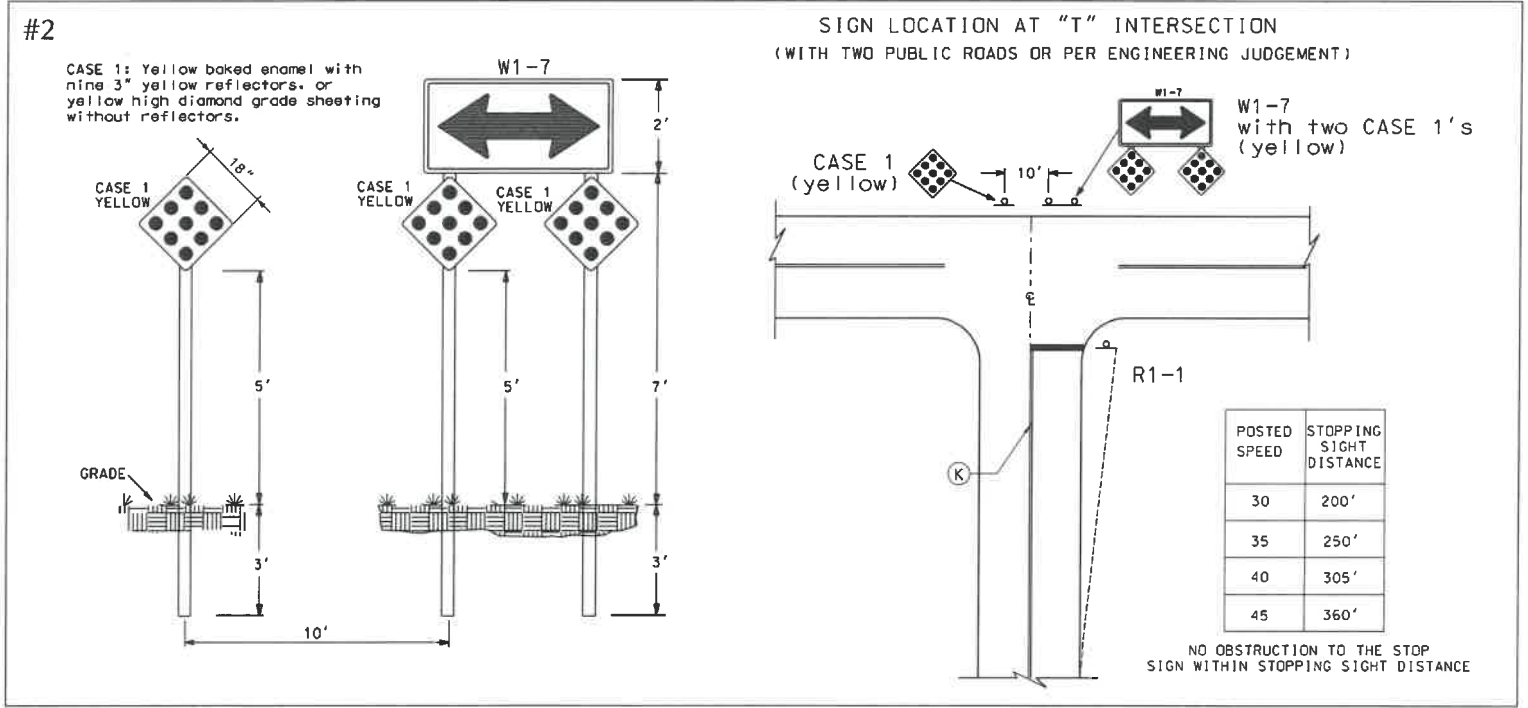
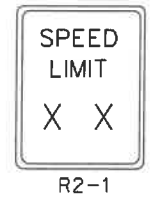
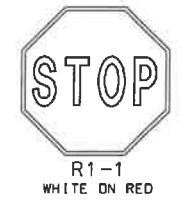
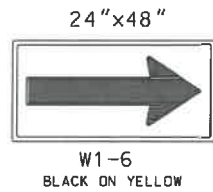
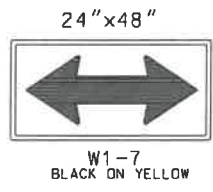
MOTASEM AL-TURK  
 DIRECTOR - TRAFFIC DIVISION

SCALE: N.T.S.  
 CONTRACT NO.:

DRAWN BY: EL DATE: 08/30/16  
 TRACED BY: DRAWING: T-P-21  
 CHECKED BY:

SHEET 9 OF 12 SHEETS

**#1 SIGN SPECIFICATIONS:**  
 SIGN FACE - DIAMOND GRADE REFLECTIVE SHEETING  
 SIZE - AS SHOWN  
 COLOR - AS SHOWN  
 HEIGHT - 7' MEASURED FROM BOTTOM OF THE SIGN TO HEIGHT OF THE NEAR EDGE OF PAVEMENT, OR TO TOP OF THE TRAFFIC SEPARATOR.  
 THICKNESS (ALUMINUM) : .080 MILS  
 THICKNESS (FIBER GLASS OR PLASTIC) : .120 MILS  
 BOLTS: 3/8" x 3/4" W/ HEX NUTS, 2 (MIN.) PER SIGN  
 POSTS: SIGNS 9 SQUARE FEET AND LARGER SHALL BE DOUBLE POSTED.



**#6 "NEXT SIGNAL" SIGNS:**  
 TO BE INSTALLED ON THOROUGHFARE ROADWAYS WITH 4 OR MORE LANES, IN MEDIAN (IF POSSIBLE) OR ON THE SIDE NOT TO OBSTRUCT PATHWAY, APPROXIMATELY 600 FEET IN ADVANCE OF INTERSECTION CROSSWALKS.  
 COLOR: WHITE LETTERS ON GREEN BACKGROUND, WHITE 1" BORDER  
 BLANK SIZE: 30"X 60" FOR MEDIANS.  
 LETTER SIZE: 10" UPPERCASE AND 8" LOWERCASE FOR STREET NAME  
 "NEXT SIGNAL" PHRASE 5" UPPERCASE

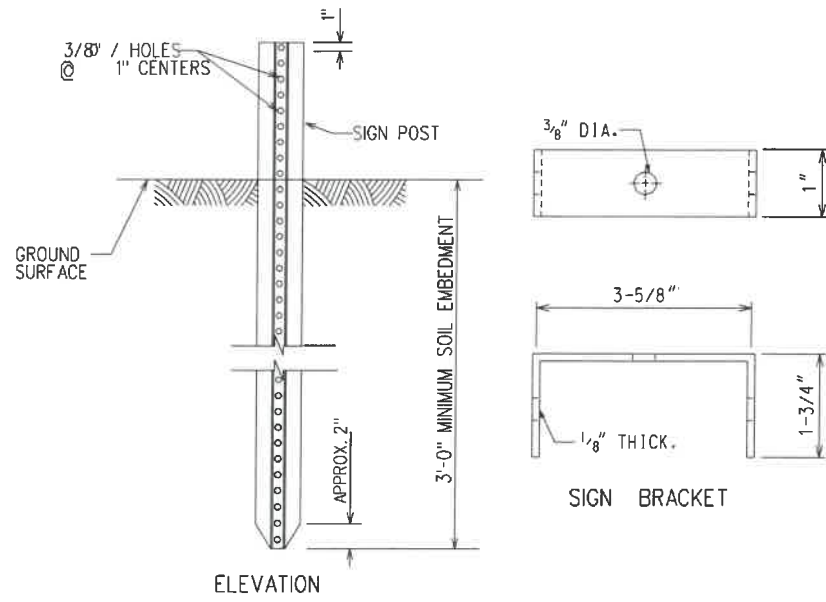
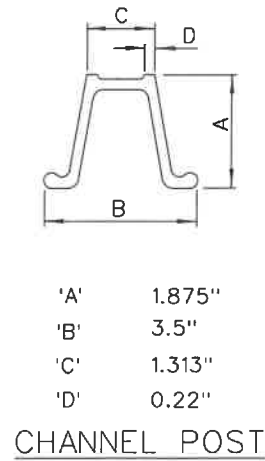


PALM BEACH COUNTY, FLORIDA  
**TRAFFIC DIVISION**  
 TYPICAL  
 3/3/18 SIGN PLACEMENT

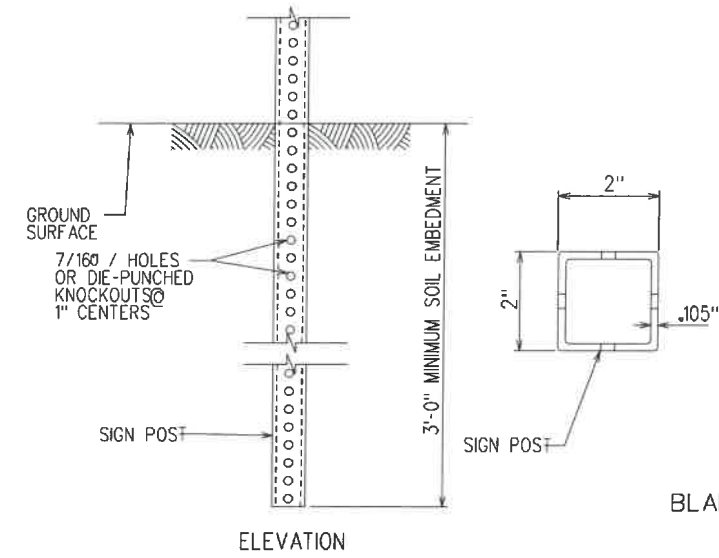
BOGDAN T. PIORKOWSKI SENIOR PROFESSIONAL ENGINEER	MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION		
NAME	DATE	SCALE	CONTRACT NO.
EL	08/31/16	N.T.S.	
DRAWN BY	TRACED BY	CHECKED BY	DRAWING
			T-P-21
NO.	DATE	REVISIONS	BY APP.
SHEET 10 OF 12 SHEETS			



ISOMETRIC VIEW



STEEL FLANGED CHANNEL POST DETAILS



STEEL SQUARE TUBE POST DETAILS

GENERAL SPECIFICATIONS:

**FLAT BLADE:** ALCOA #86054.6063-T6 ALLOY, ETCHED, DEGREASED WITH #1200 ALODINE FINISH WITH #3877 GREEN DIAMOND GRADE BACKGROUND AND EQUAL DIMENSIONS - 9" & 12" MIN. H, 24", 30", 36" AND 42" L.

**LETTERS:** NAME - 6" UPPERCASE WITH 4.5" LOWERCASE & 9" UPPERCASE WITH 6.75" LOWERCASE, SERIES 'B' # 3870 DIAMOND GRADE (SILVER) OR EQUAL - SUFFIX - 4.5".

**POST:** STEEL FLANGED CHANNEL POST 3 LBS. WEIGHT PER FOOT WITH BAKED GREEN ALKYD OR GALVANIZED FINISH PER A.S.T.M. -A-123 WITHOUT ANCHOR PLATES. SQUARE POST PER FDOT INDEX 700-010.

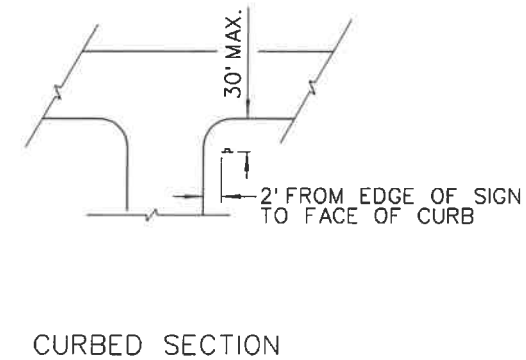
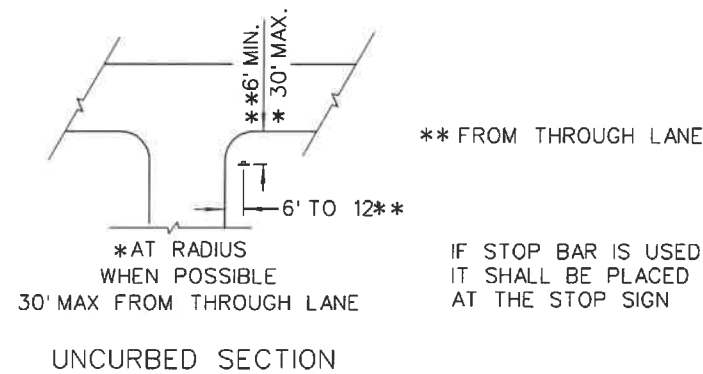
BRACKETS SHALL BE ATTACHED FIRMLY ON STANDARD SQUARE TUBE OR U-CHANNEL POSTS BY MEANS OF (2) 5/16" end view DIAMETER HEX HEAD BOLTS.

**STOP SIGN:** R1-1 MUTCD DIAMOND GRADE

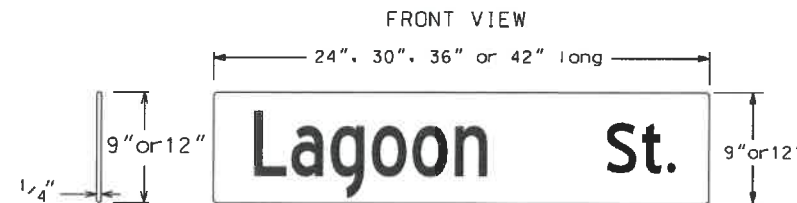
**LOCATION:** ONE PER INTERSECTION AS INDICATED ON THE PLANS.

**POLICY:** 9" BLADES WITH 6" UPPERCASE WITH 4.5" LOWERCASE LETTERS FOR TWO LANE ROADS WITH A SPEED LIMIT UNDER 45 MPH.

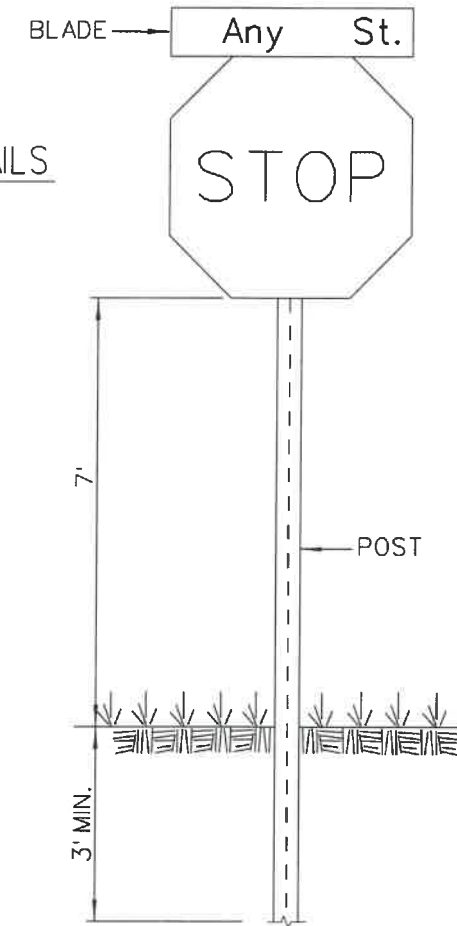
12" BLADES WITH 9" UPPERCASE WITH 6.75" LOWERCASE LETTERS FOR:  
-THOROUGHFARE ROADS FOUR LANES OR WIDER.  
-TWO LANE ROADS WITH A POSTED SPEED LIMIT OF 45 MPH OR MORE.  
ONLY ONE BLADE WILL BE INSTALLED AT INTERSECTION WITH THOROUGHFARE ROAD INDICATING THE SIDE STREET NAME.



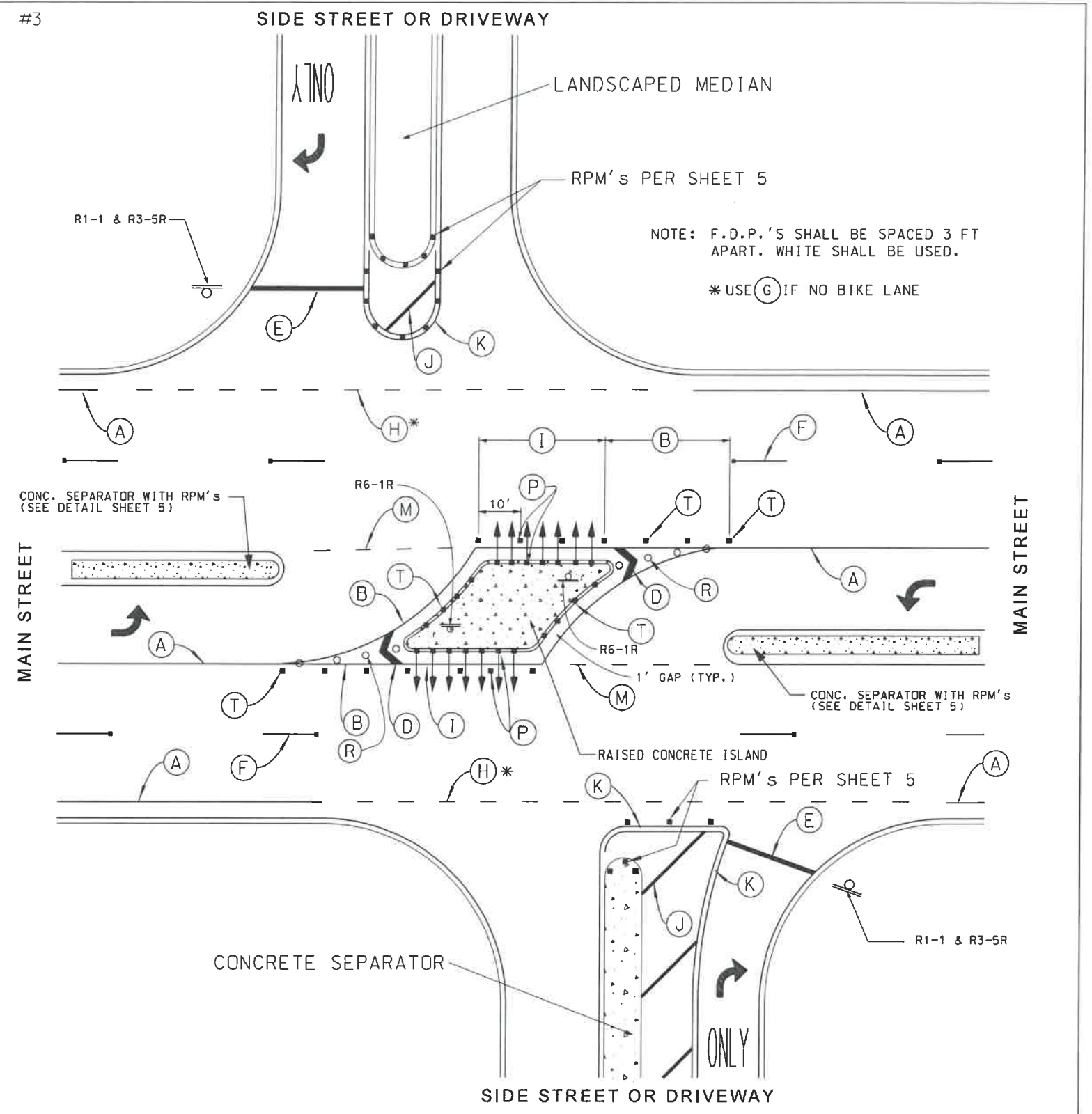
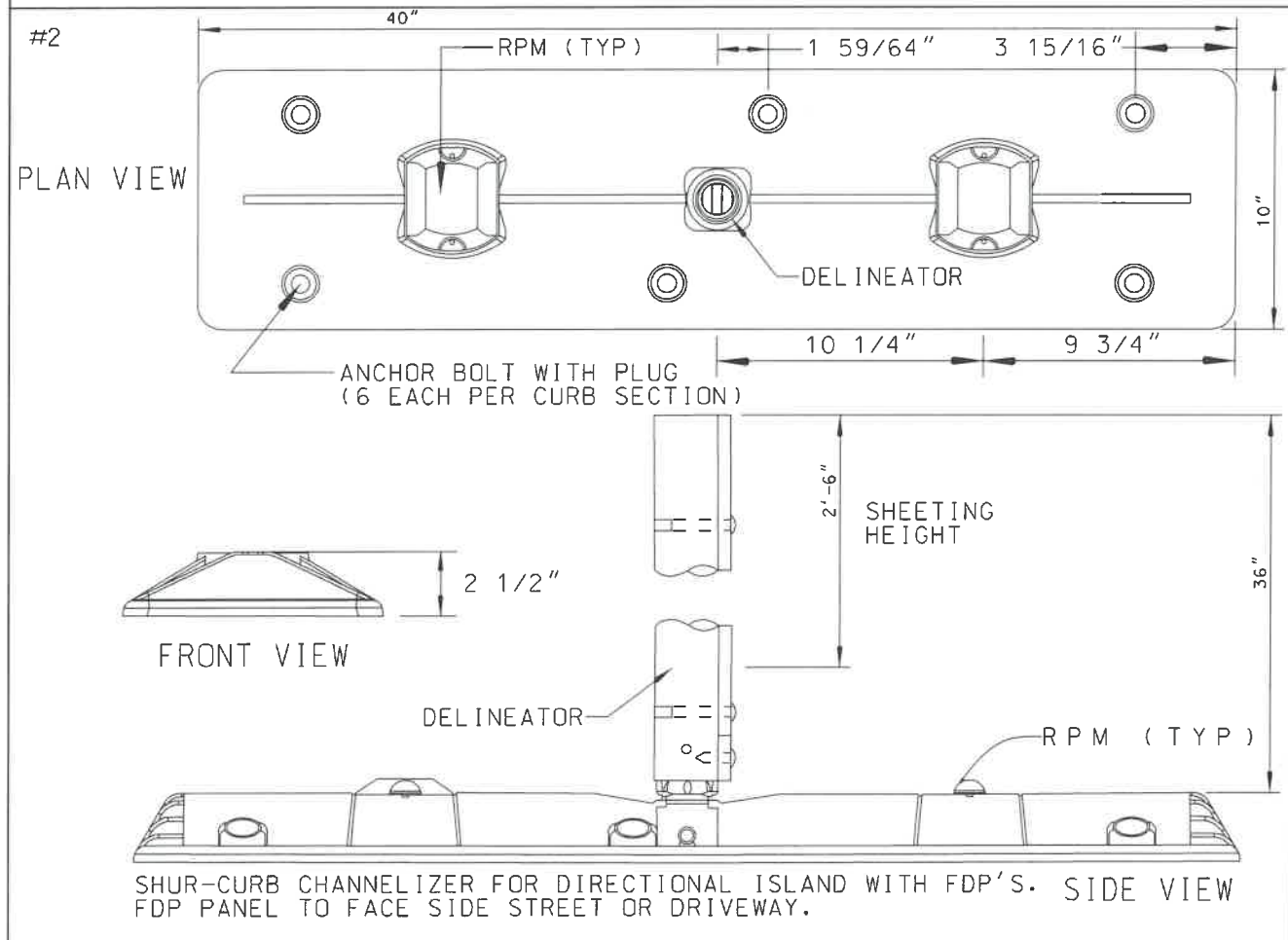
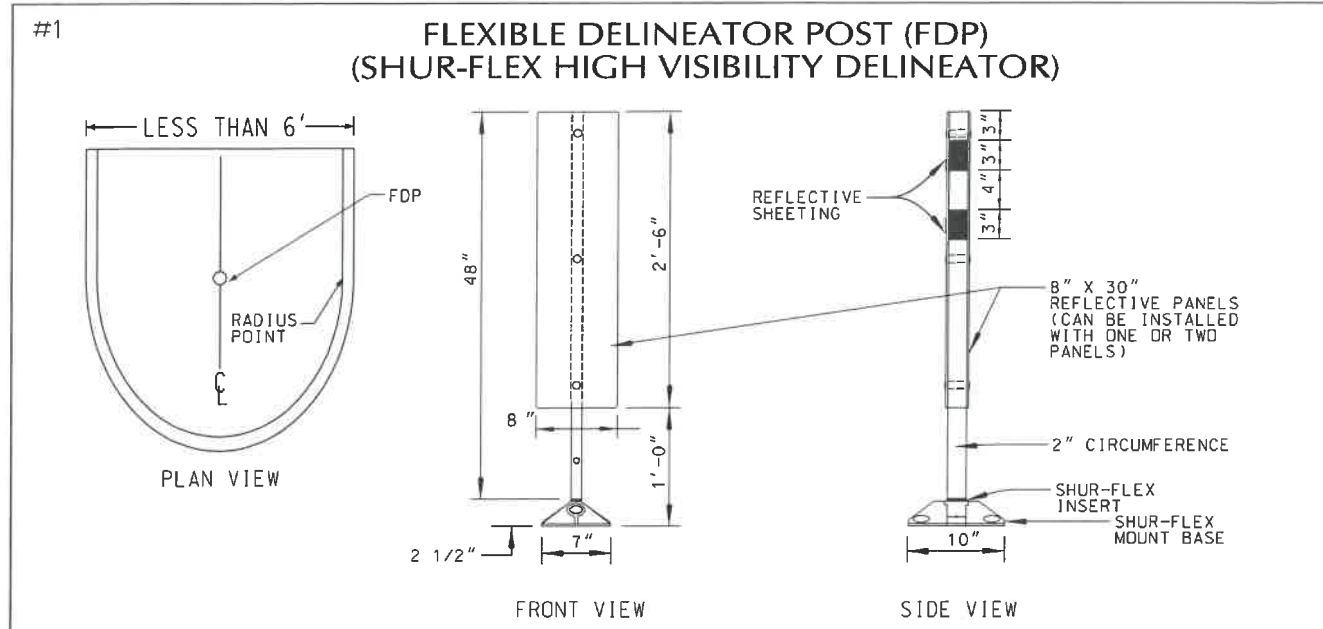
TYPICAL STOP SIGN PLACEMENT



STREET NAME SIGN D3-1



	PALM BEACH COUNTY, FLORIDA			
	TRAFFIC DIVISION			
	TYPICAL			
	STREET NAME SIGN WITH STOP SIGN			
BOGDAN T. PIKOROWSKI		MOTASEM AL-TURK		
SENIOR PROFESSIONAL ENGINEER		DIRECTOR - TRAFFIC DIVISION		
NAME	DATE	SCALE	CONTRACT NO.	
EL	08/31/16	N.T.S.		
DRAWN BY		DRAWING		
TRACED BY		T-P-21		
CHECKED BY		SHEET 11 OF 12 SHEETS		



1. THE FDP SHALL MATCH THE ADJACENT EDGELINE COLOR (YELLOW OR WHITE ONLY).
2. WHEN SHOWN ON PLANS, FDP'S SHALL BE IDENTIFIED IN A SIMILAR MANNER TO THAT SHOWN ON THIS TYPICAL. COLOR AND NUMBER OF EACH MUST BE SHOWN ON ALL SUMMARY OF QUANTITIES SHEETS. ALSO, COLOR MUST BE SPECIFIED FOR EACH FDP GROUP ON THE PLANS.
3. ON DIRECTIONAL ISLANDS THE FDP'S ARE REQUIRED TO SUPPLEMENT THE EXISTING SIGNING, MARKINGS, AND RPM'S TO DETER WRONG WAY MANEUVERS. FDP'S SHOULD BE INSTALLED MIDWAY BETWEEN THE STRIPED CHEVRONS.
4. SHUR-FLEX HIGH VISIBILITY FLEXIBLE DELINEATOR (FDP). SHALL BE CONSTRUCTED FOR MEDIANS LESS THAN 6' WIDE. FOR MEDIANS AT LEAST 6' WIDE INSTALL R4-7 SIGN WITH CASE I YELLOW REFLECTORS ONLY.
5. SHEETING TYPE: DIAMOND GRADE SERIES 3900 SERIES TYPE 3



PALM BEACH COUNTY, FLORIDA			
<b>TRAFFIC DIVISION</b>			
TYPICAL			
FLEXIBLE DELINEATOR POST 3/13/21 PLACEMENT DETAIL DIRECTIONAL ISLAND			
BOGDAN T. PIORRROWSKI SENIOR PROFESSIONAL ENGINEER		MOTASEM AL-TURK DIRECTOR - TRAFFIC DIVISION	
DRAWN BY	EL	DATE	02/06/18
TRACED BY		SCALE	N.T.S.
CHECKED BY		DRAWING	T-P-21
NO.	DATE	REVISIONS	BY APP
		SHEET 12 OF 12 SHEETS	