

EXHIBIT A
I-44 NORTH OUTER ROAD
ST. LOUIS COUNTY
DRAINAGE IMPROVEMENT



Figure 1

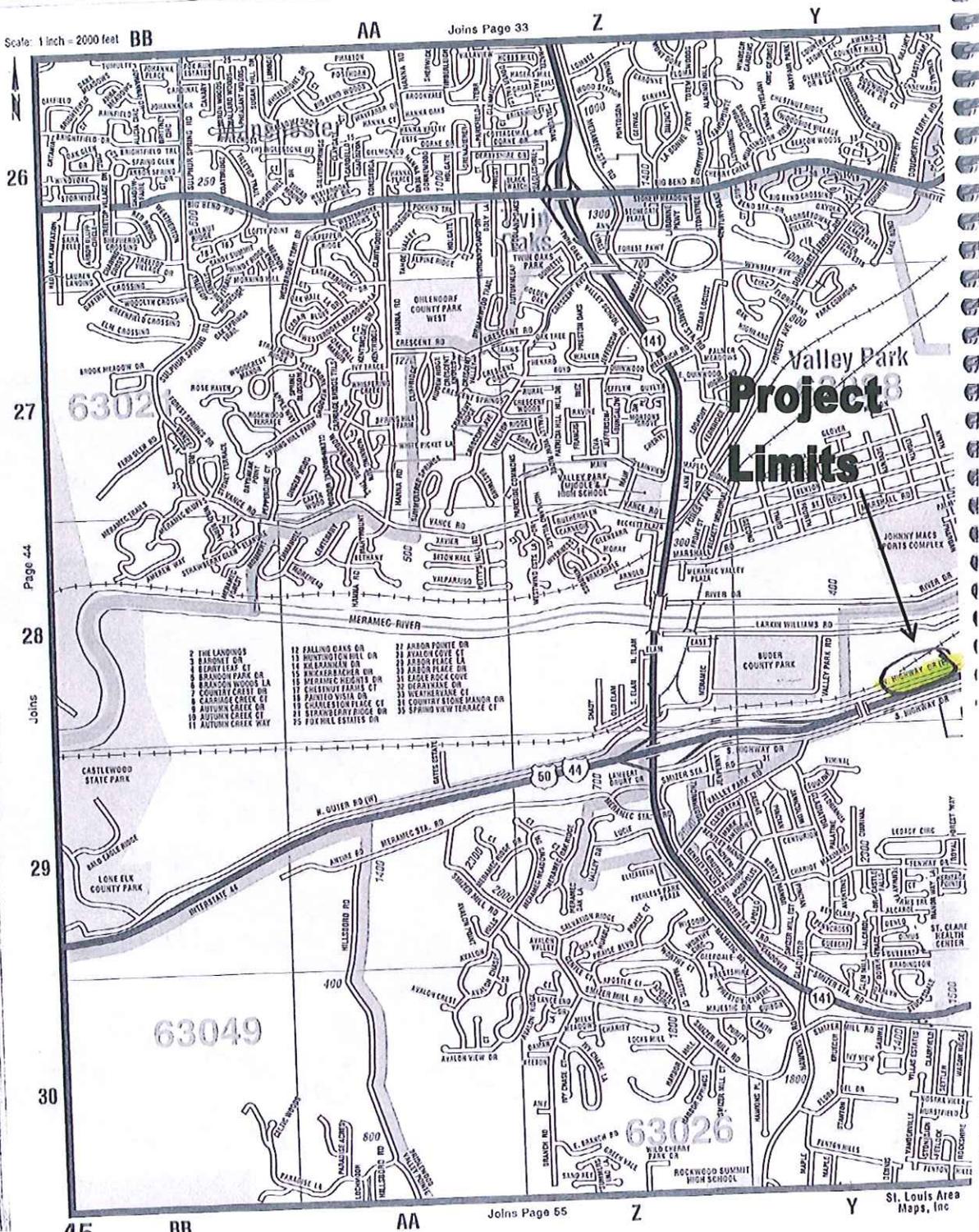
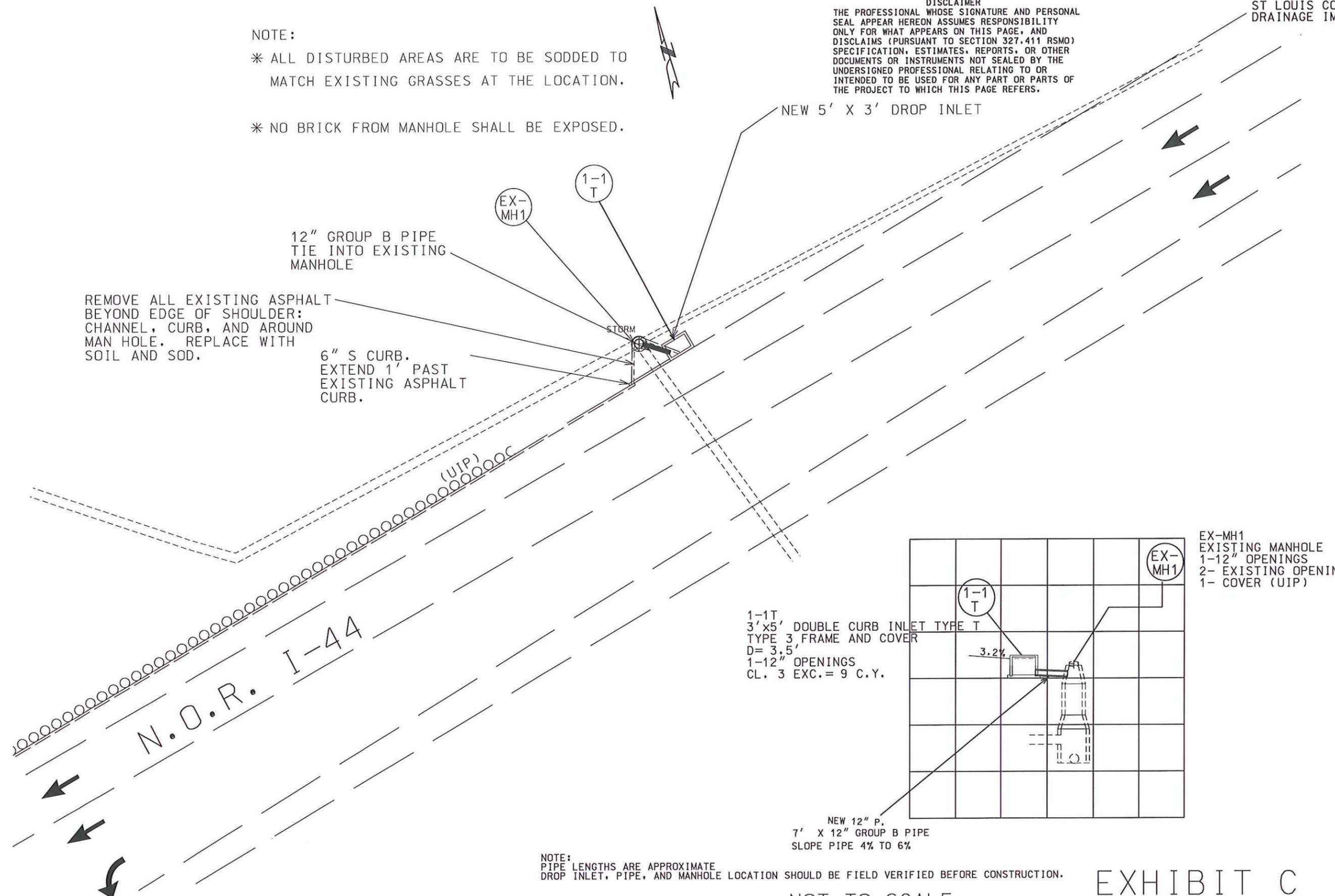


Figure 2

DISCLAIMER
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NOTE:
* ALL DISTURBED AREAS ARE TO BE SODDED TO MATCH EXISTING GRASSES AT THE LOCATION.
* NO BRICK FROM MANHOLE SHALL BE EXPOSED.



REMOVE ALL EXISTING ASPHALT BEYOND EDGE OF SHOULDER: CHANNEL, CURB, AND AROUND MAN HOLE. REPLACE WITH SOIL AND SOD.

12" GROUP B PIPE TIE INTO EXISTING MANHOLE

6" S CURB. EXTEND 1' PAST EXISTING ASPHALT CURB.

NEW 5' X 3' DROP INLET

STORM

EX-MH1

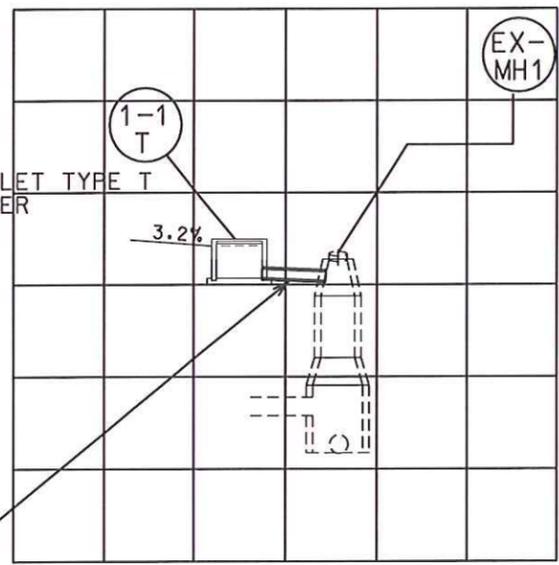
1-1 T

N.O.R. I-44

(UIP)

EX-MH1 EXISTING MANHOLE
1-12" OPENINGS
2- EXISTING OPENINGS
1- COVER (UIP)

1-1T
3'x5' DOUBLE CURB INLET TYPE T
TYPE 3 FRAME AND COVER
D= 3.5'
1-12" OPENINGS
CL. 3 EXC.= 9 C.Y.



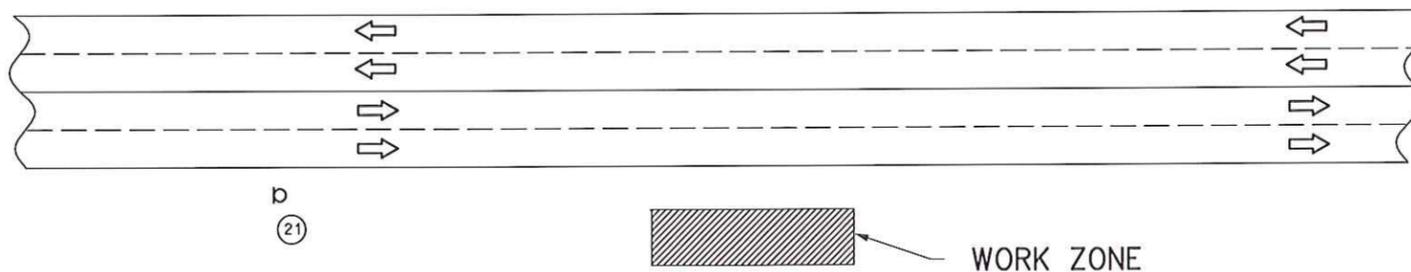
NEW 12" P.
7' X 12" GROUP B PIPE
SLOPE PIPE 4% TO 6%

NOTE:
PIPE LENGTHS ARE APPROXIMATE
DROP INLET, PIPE, AND MANHOLE LOCATION SHOULD BE FIELD VERIFIED BEFORE CONSTRUCTION.

NOT TO SCALE

EXHIBIT C

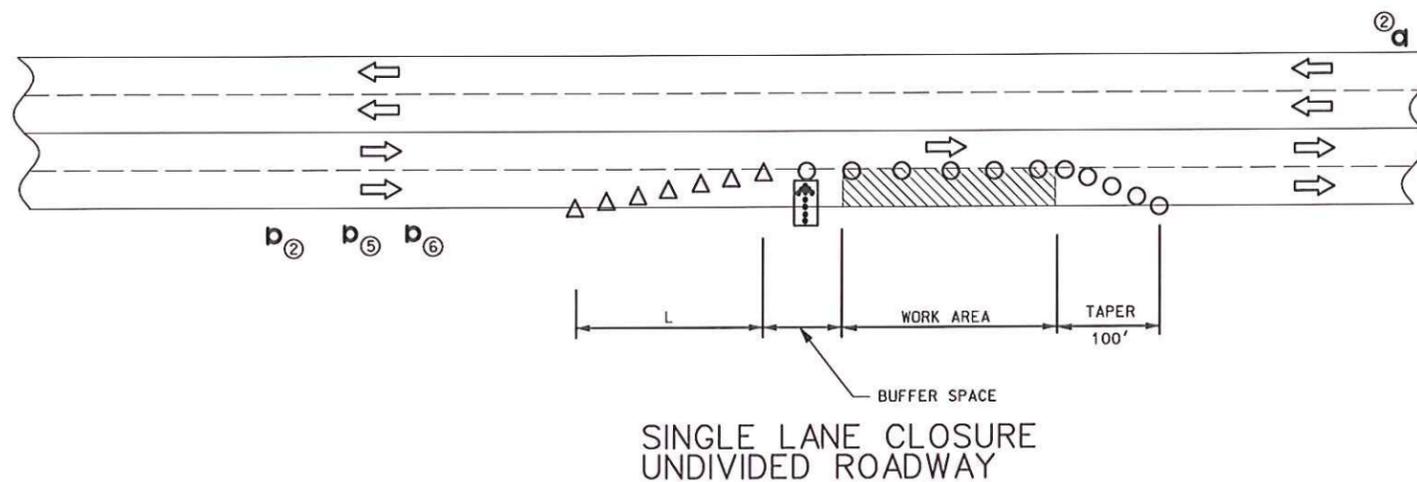
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



WORK BEYOND RIGHT SHOULDER - UNDIVIDED OR DIVIDED ROADWAYS

USED FOR WORK THAT OCCURS OFF THE ROADWAY SHOULDER BUT WITHIN THE CLEAR ZONE.
NOT TO BE USED WHEN WORK VEHICLES ARE PARKED ALONG THE SHOULDER EVEN WHEN
THE WORK IS BEING PERFORMED OFF THE SHOULDER.

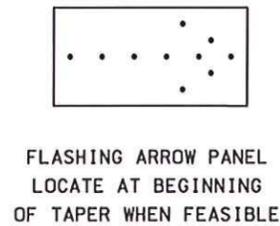
CONSTRUCTION SIGNS
1 EACH SHOULDER WORK AHEAD



CONSTRUCTION SIGNS
2 EACH ROAD WORK AHEAD
1 EACH RIGHT (LEFT) LANE CLOSED AHEAD
1 EACH RIGHT (LEFT) LANE CLOSED
1 EACH FLASHING ARROW PANEL

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

TRAFFIC CONTROL DEVICES



GENERAL NOTES:

1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN
2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
4. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE. ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS.

TRAFFIC CONTROL LEGEND

- SIGN
- CHANNELIZER, TRIM LINE OR DRUM-LIKE
- △ DIRECTIONAL INDICATOR BARRICADES (DIBS)

Sign Spacing, Device Spacing and Channelizing Taper Lengths

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES					
SPEED (1) MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA
40-45	450	495	540	40	100

BUFFER SPACE	
SPEED (1) MPH	BUFFER SPACE
40-45	220

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
SPEED (1) MPH	SIGN SPACING (FT)	
	NON-DIVIDED HIGHWAYS (FT)	DIVIDED HIGHWAYS (FT)
40-45	350	500

TAPER LENGTH (L)
 L = WS FOR 45 MPH OR MORE
 L = $\frac{WS^2}{60}$ FOR 40 MPH OR LESS
 L = TAPER LENGTH IN FEET
 W = LATERAL SHIFT IN FEET
 S = POSTED SPEED IN MPH

NOTES:

- DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.
- (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OR SIGNED CONDITION
- (2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS
- (3) TAPER LENGTHS SHOWN INCLUDE LENGTH REQUIRED FOR LANE AND 10' SHOULDER.

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