

IMPEDIMENTS

- Count Manhole "A" and inlet in "Lane 3".
- Count Manhole "B" in "Lane 1" & "Lane 2".
- Count Manhole "C" & "D" in "Lane 3".

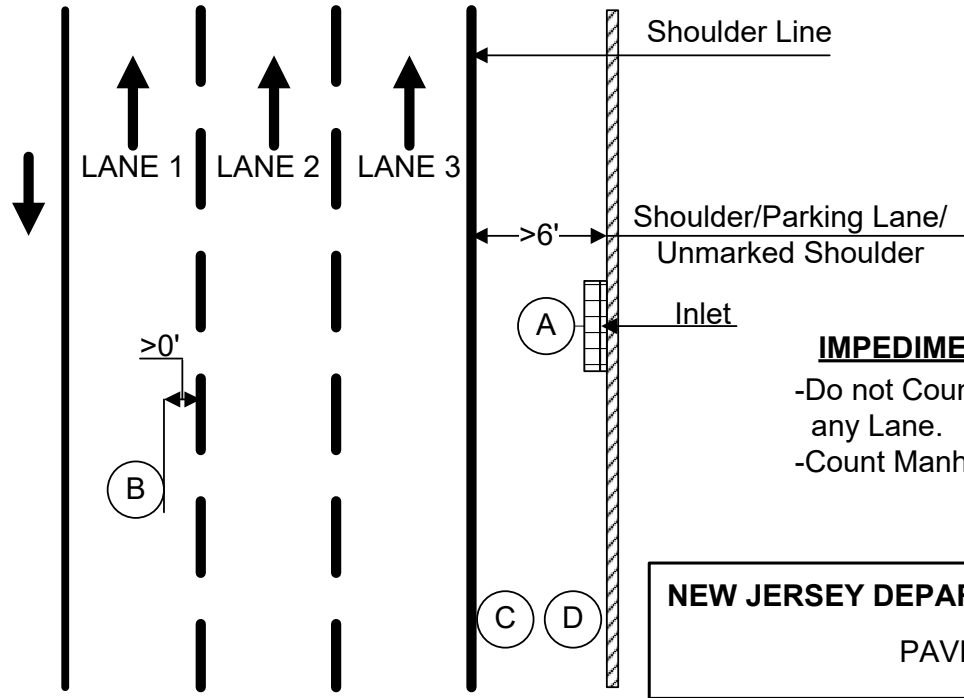
Note: Parking lane or unmarked shoulder is additional area adjacent to 12 ft wide travel way available for parking, break down etc. and not marked as a shoulder.

IMPEDIMENTS/ SHORT SECTION (SS)

- Count "L" in Lane 1 as a "SS", if Left Shoulder width is $\le 6'$. Do not count any manhole or inlet or any impediment, if located within $L+50'$.

Figure-2

Figure-1



IMPEDIMENTS

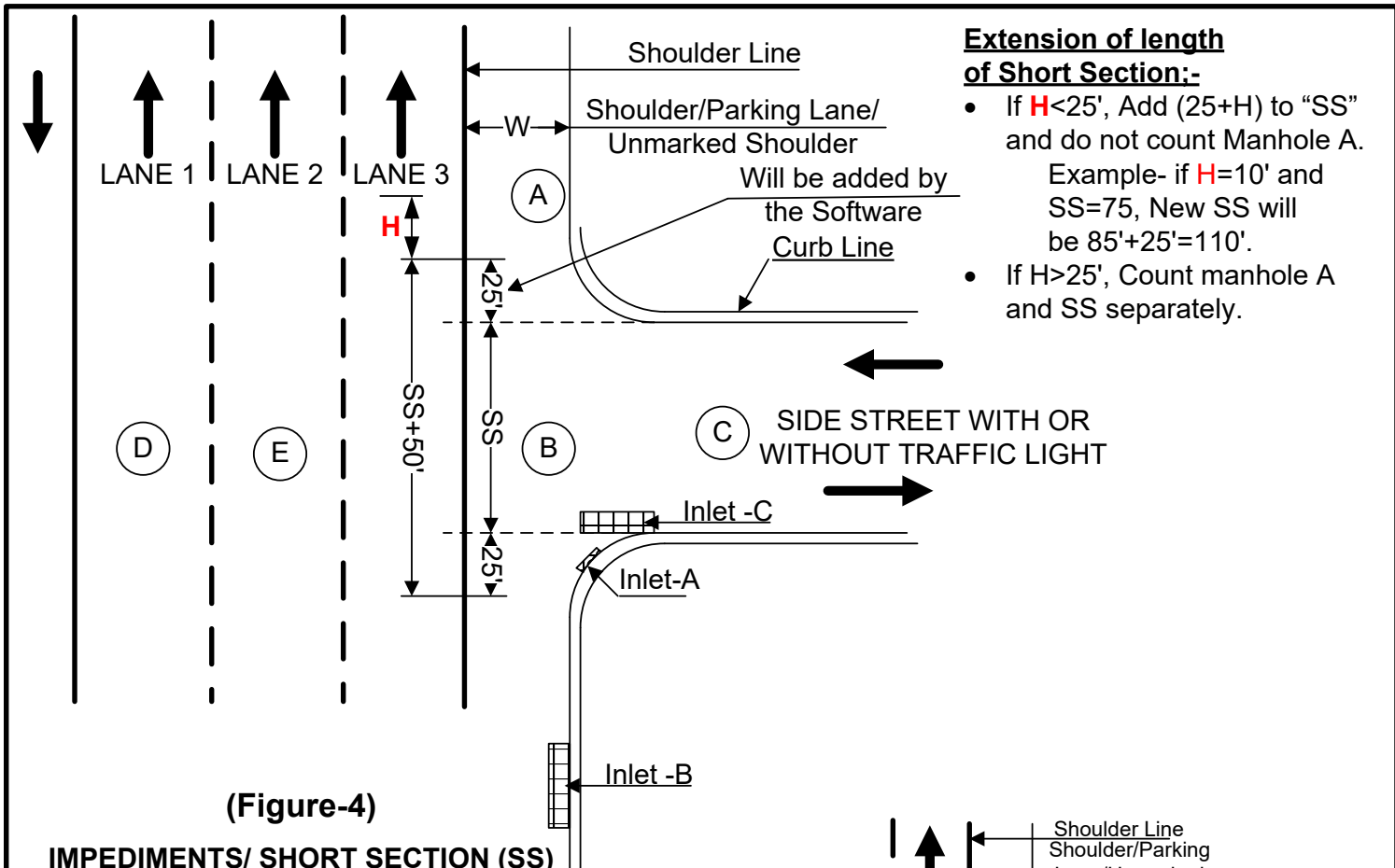
- Do not Count Manholes "A, C & D" and inlet in any Lane.
- Count Manhole "B" in "Lane 1".

Figure-3

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EXAMPLES FOR RIDE QUALITY EXCLUSION CALCULATION
Version 3.00

Scale: N.T.S.	Date : Feb 06, 2014	Sheet 1 of 4
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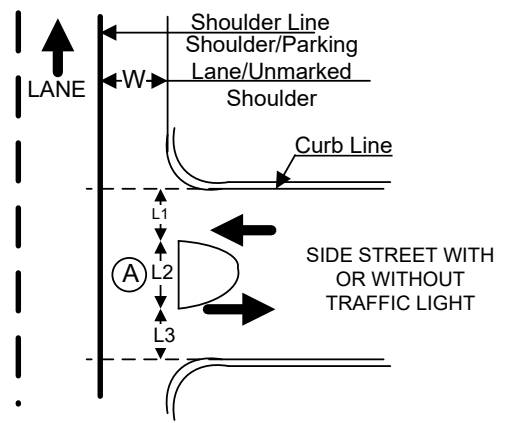
Extension of length of Short Section:-

- If $H < 25'$, Add $(25+H)$ to "SS" and do not count Manhole A. Example- if $H=10'$ and $SS=75$, New SS will be $85'+25'=110'$.
- If $H > 25'$, Count manhole A and SS separately.

(Figure-4)

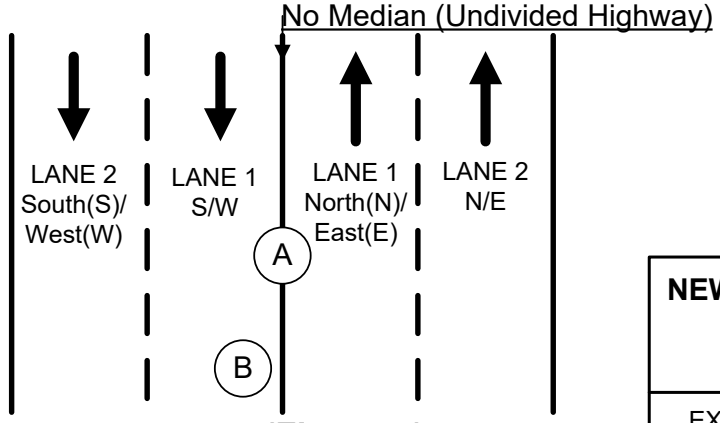
IMPEDIMENTS/ SHORT SECTION (SS)

- Count Manhole "A" in "Lane 3", if $W \leq 6'$
- Count SS (Short Section) in "Lane 3", if $W \leq 6'$.
- Do not Count Manhole "B" in "Lane 3", if it is located within $SS+50'$ i.e. excluded Area.
- Count Inlet "A" in "lane 3", if W is $\leq 6'$ and located outside the excluded length i.e. $SS+50'$.
- Count Inlet "B" in Lane 3, if $W \leq 6'$
- Do not count inlet "C" and manhole "C".
- Count Manhole "D" & "E" in "Lane 1" & "Lane 2" respectively.
- If $H < 25'$, add $(H+25)'$ to "SS" and do not count this manhole/inlet/utility valve for exclusion. Example- if manhole "A" is located at $15'$ from the end of "SS", add $25+15=40'$ to SS. Now "SS" is $SS+40'$. RQR will also add 50 ft threshold for SS.



- If $L2 \leq 50$ and $W \leq 6'$, $SS=L1+L2+L3$. Do not Count Manhole "A", if located within excluded area i.e. Excluded length= $SS+50'$.
- If $L2 > 50$ and $W \leq 6'$, Count two SS i.e. L1 and L3. RQR will add 50 ft. Count Manhole "A", if located outside the Excluded area i.e Excluded Length= $SS+50'$.
- If $W > 6'$, Do not count SS (Refer Figure -4)

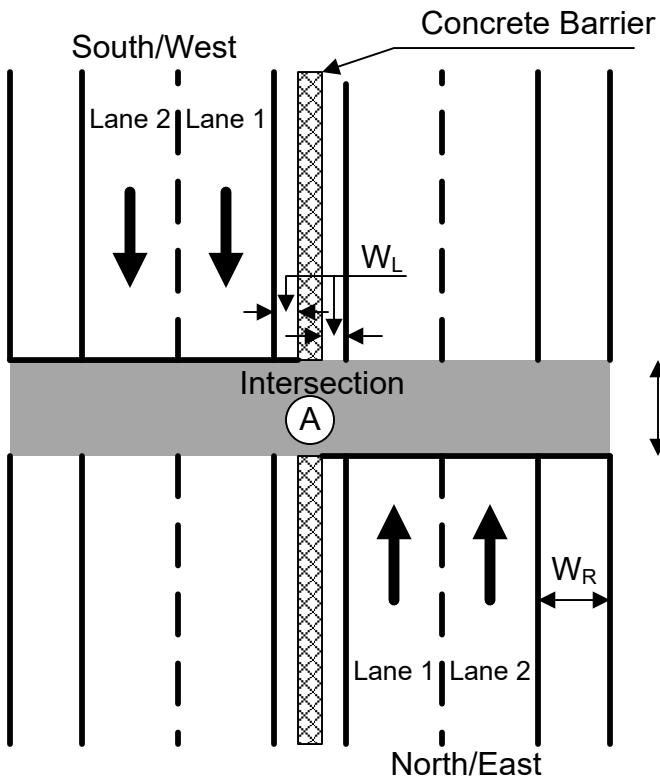
(Figure-6)



IMPEDIMENTS (Figure-5)

- Count Manhole "A" in "Lane 1 S/W" and "Lane 1 N/E"
- Count Manhole "B" in "Lane 1 S/W"

NEW JERSEY DEPARTMENT OF TRANSPORTATION		
PAVEMENT DESIGN		
EXAMPLES FOR RIDE QUALITY EXCLUSION CALCULATION		
Version 3.00		
Scale: N.T.S.	Date : Feb 6, 2014	Sheet 2 of 4



W_L = Width of left shoulder
 W_R = Width of right shoulder
 Excluded limit = $L + 50'$

FIGURE 7

PAVING BOTH DIRECTIONS UNDER THE CONTRACT

1. Do not count "L" as SS for lane 1 for any width of W_L .
2. Count all metals located within left shoulder as IM for Lane 1, if $W_L \leq 6'$.
3. Count "A" as "IM" for Lane 1 of both directions, if $W_L \leq 6'$.
4. Do not Count any metal or manhole A as "IM", if $W_L > 6'$.

PAVING ONE DIRECTION UNDER THE CONTRACT

5. Count "L" as SS for lane 1, if $W_L \leq 6'$.
6. Do not Count "A" for Lane 1, if $W_L \leq 6'$ but located within excluded area..
7. Do not count "L" for lane 1 as SS, if $W_L > 6'$.
8. Do not count any metal located within left shoulder, if $W_L > 6'$.
10. Count metal as IM located in left shoulder, $W_L \leq 6'$ but located outside the excluded limit.

RIGHT SHOULDER

11. Count "SS" for lane 2, if $W_R \leq 6'$.
12. Do not Count "SS" for lane 2, if $W_R > 6'$.

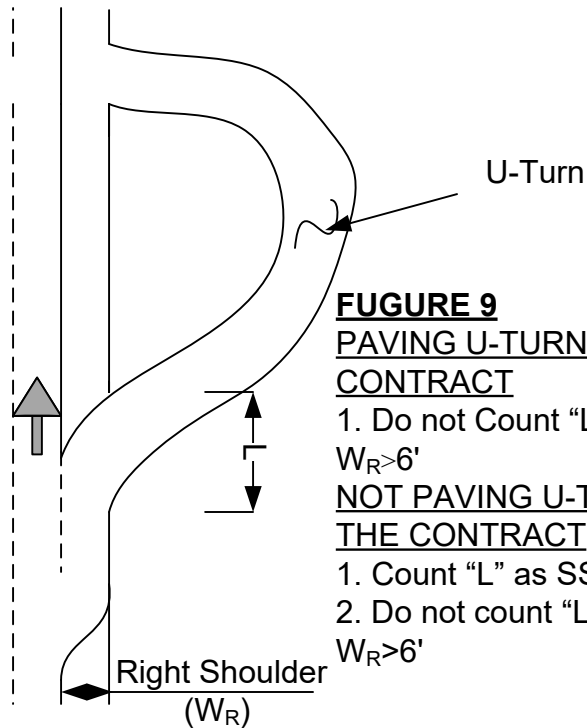


FIGURE 9

PAVING U-TURN UNDER THE CONTRACT

1. Do not Count "L" as SS, if $W_R > 6'$

NOT PAVING U-TURN UNDER THE CONTRACT

1. Count "L" as SS, if $W_R < 6'$
2. Do not count "L" as SS, if $W_R > 6'$

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PAVEMENT DESIGN

EXAMPLES FOR RIDE QUALITY EXCLUSION CALCULATION

Version 3.00

Scale: N.T.S.

Date :
Feb 6, 2014

Sheet 3 of 4

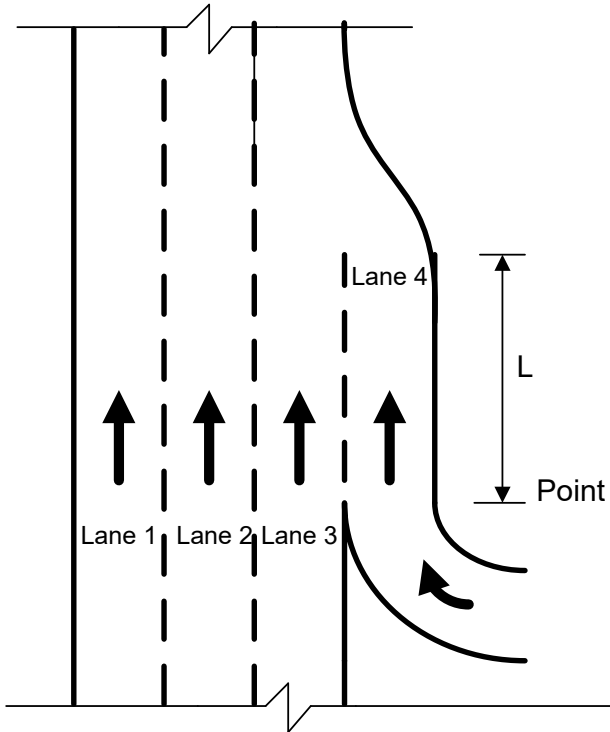


FIGURE 10
ACCELARTION LANE LENGTH

Lane 4 will be tested, if $L \geq 1000$ ft.

Note: -If multiple curves are existing within the length L, Pavement Design Unit should be consulted to determine limits of ride quality.

Point of Tangent (PT)

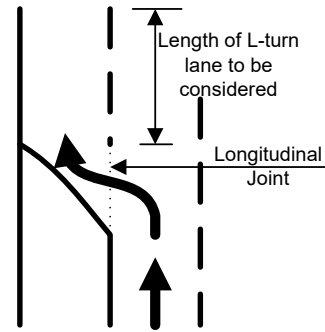


FIGURE 11
LENGTH OF L-TURN LANE

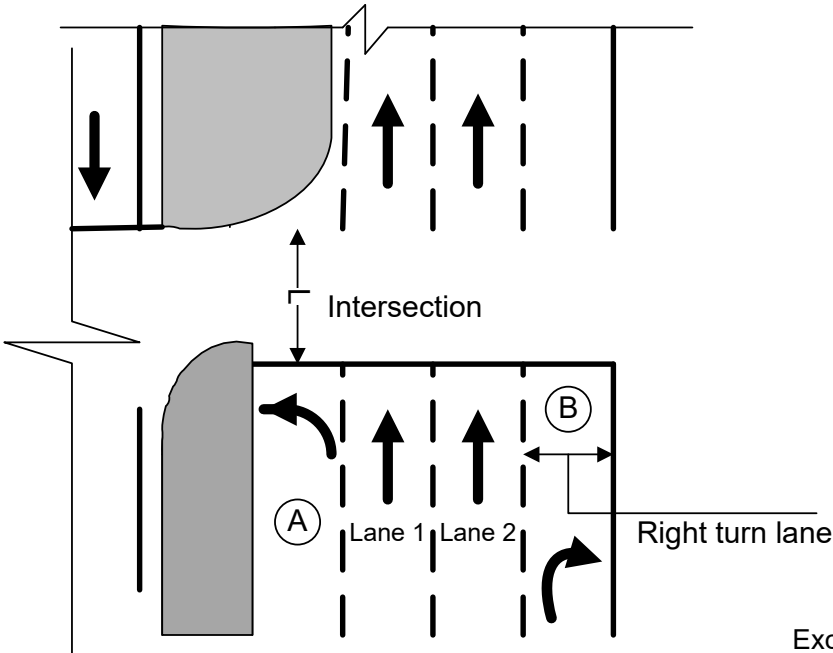
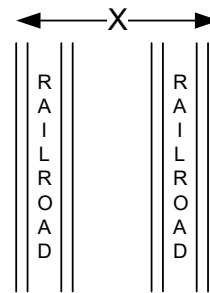


FIGURE 12

INTERSECTION WITH TURNING LANES

1. If left turn lane < 1000 ft, left turn lane will not be tested. Do not count "L" as "SS" for lane 1. Also, do not count Manhole "A" for lane 1.
2. If left turn lane ≥ 1000 ft, left turn lane will be tested as a Lane. Do not count "L" as "SS" for L-turn lane, if lane terminate at the intersection. If L-turn lane continue after intersection, count "L" as "SS" for L-turn lane. Count manhole/inlet/utility valves located in L-turn lane for L-turn lane.
3. if right turn lane < 1000', right turn lane will not be tested. Do not count "L" as "SS" for Lane .
4. If right turn lane ≥ 1000 ft, right turn lane will be tested as a lane. Count "L" as "SS" for right turn lane and count all metal as "IM" located within R-turn lane for R-turn lane.



Exclusion Width= X +Threshold length of Impediment
(Enter X as SS in RQR)

FIGURE 13
MULTIPLE RAILROAD

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EXAMPLES FOR RIDE QUALITY EXCLUSION CALCULATION

Version 3.00

Scale: N.T.S.

Date :
Feb 6, 2014

Sheet 4 of 4