

WHERE A GUARD RAIL INSTALLATION RUNS PARTLY THROUGH A CUT AND PARTLY THROUGH A FILL, AND THE FULL SHOULDER WIDTH (S) IS LESS FOR A CUT THAN A FILL, THE LOCATION OF THE GUARD RAIL (O_L OR O_R) IS TO BE IN ACCORDANCE WITH THE FULL SHOULDER WIDTH.

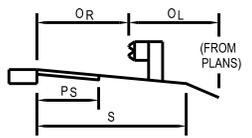
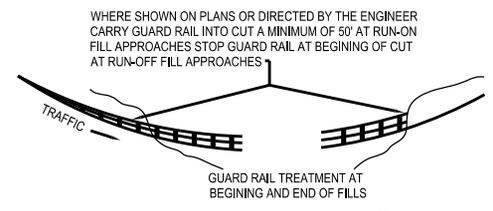


TABLE I
NORMAL GUARD RAIL LOCATION-THROUGH TRAFFIC LANES LEFT OF TRAFFIC

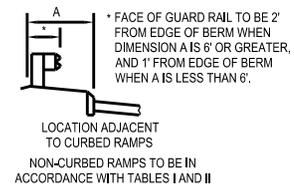
FULL SHOULDER WIDTH (S)	PAVED SHOULDER WIDTH (P _S)	OFFSET FROM EDGE OF PAVEMENT TO FACE OF GUARD RAIL (O _L)
10'	0'3.4"	8.7'
8'	0'3.4"	6.5'
6'	4'	5'
6'	0'3"	4'
5'	0'3"	4'
4'	0	3'

TABLE II
NORMAL GUARD RAIL LOCATION-THROUGH TRAFFIC LANES RIGHT OF TRAFFIC

FULL SHOULDER WIDTH (S)	PAVED SHOULDER WIDTH (P _S)	OFFSET FROM EDGE OF PAVEMENT TO FACE OF GUARD RAIL (O _R)
15'	10'	12'
12'	0'6.8"	10.9'
10'	0'6"	8.7'
8'	6"	7'
8'	0'	6.5'
6'	0'	4'
5'	0'	4'
4'	0'	3'



GUARD RAIL TREATMENT AT BEGINNING AND END OF FILLS



LOCATION ADJACENT TO CURBED RAMPS
NON-CURBED RAMPS TO BE IN ACCORDANCE WITH TABLES I AND II

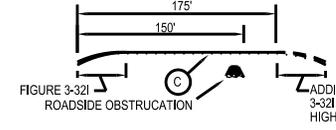
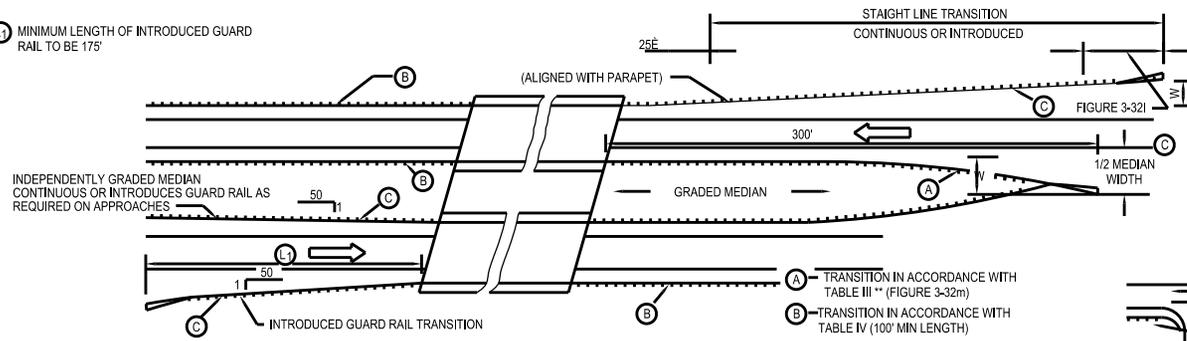


FIGURE 3-32i
ROADSIDE OBSTRUCTION
INTRODUCED GUARD RAIL AT ROAD SIDE HAZARDS LOCATIONS

SEE DETAIL A FOR GUARD RAIL LOCATION ADJACENT TO MEDIAN OBSTRUCTION (PIER, SIGN, ETC.)

① MINIMUM LENGTH OF INTRODUCED GUARD RAIL TO BE 175'



GUARD RAIL SITUATIONS DEPICTED HEREON ARE APPLICABLE TO ALL ROADWAY SYSTEMS EXCEPT THAT FIGURE 2-30k IS NOT TO BE USED ON SECONDARY ROADS HAVING AN ADT OF LESS THAN 750

A STRAIGHT LINE TRANSITION FOR EITHER INTRODUCED OR CONTINUOUS GUARD RAIL IS TO BE USED SPLAY AS SHOWN ON PLANS (50:1 DESIRABLE) LENGTH SHALL NOT BE LESS THAN MINIMUM SHOWN. TERMINAL TREATMENTS ON INTRODUCED GUARD RAIL ARE TO BE FLARED FROM STRAIGHT LINE TRANSITION.

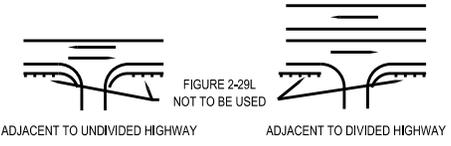
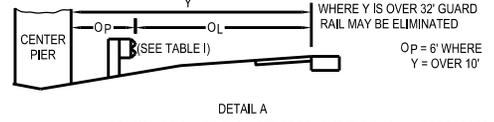
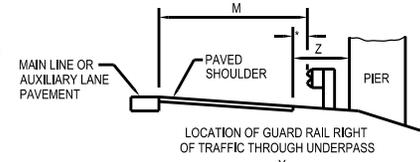
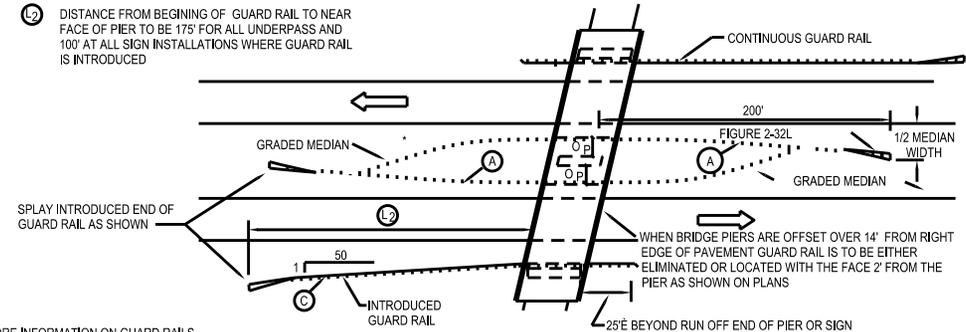


FIGURE 2-29L
NOT TO BE USED
ADJACENT TO UNDIVIDED HIGHWAY
ADJACENT TO DIVIDED HIGHWAY

* SUFFICIENT OPENING FOR MOWING AND MAINTENANCE EQUIPMENT TO BE PROVIDED WHERE REQUIRED

② DISTANCE FROM BEGINNING OF GUARD RAIL TO NEAR FACE OF PIER TO BE 175' FOR ALL UNDERPASS AND 100' AT ALL SIGN INSTALLATIONS WHERE GUARD RAIL IS INTRODUCED



DETAIL A
LOCATION OF GUARD RAIL LEFT OF TRAFFIC THROUGH UNDERPASSES OR OTHER MEDIAN OBSTRUCTION (GRADED MEDIAN)

REF: FOR MORE INFORMATION ON GUARD RAILS SEE AASHTO "GUIDE FOR SELECTING, LOCATING AND DESIGNING TRAFFIC BARRIERS"

FOR TABLES III AND IV AND GENERAL NOTES SEE FIGURE 2-30p & q

TYPICAL WITH BEAM GUARD RAIL INSTALLATION CRITERIA

DATE

FIGURE 2-30h