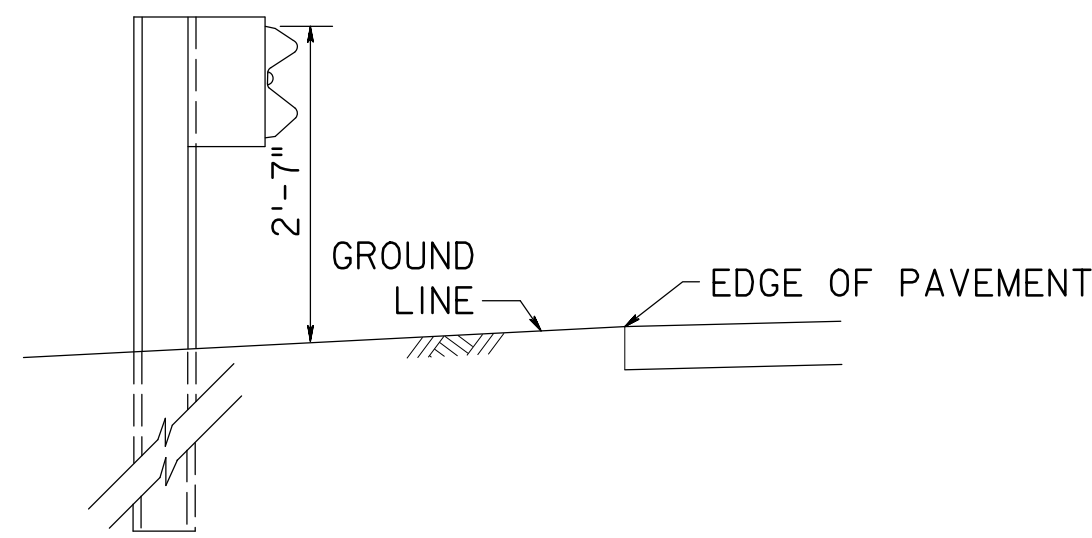


RAIL HEIGHT DETERMINATION WITH CONCRETE CURB  
(SEE NOTE 1)

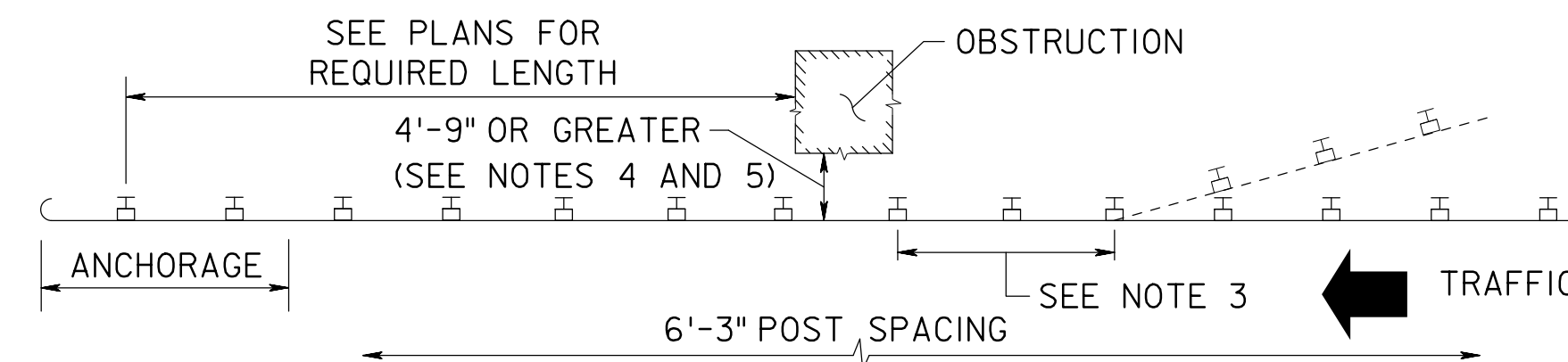


RAIL HEIGHT DETERMINATION WITHOUT CURB

**NOTES:**

1. GUIDE RAIL SHALL BE SET FLUSH WITH GUTTER LINE WHEN CONCRETE CURB IS PRESENT.
2. SEE PLANS FOR GUIDE RAIL OFFSET FROM EDGE OF PAVEMENT.

RAIL HEIGHT DETERMINATION



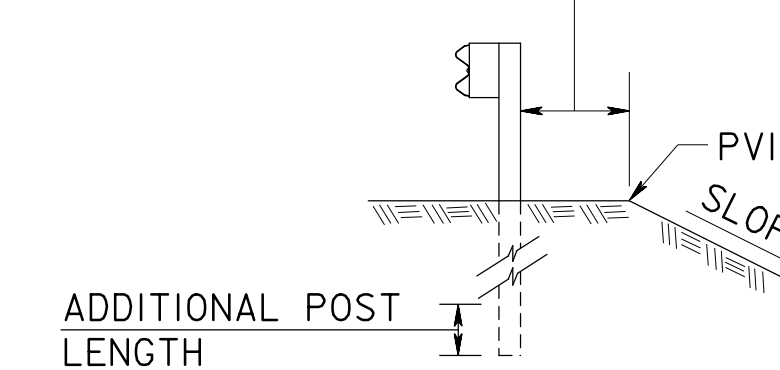
**NOTES:**

1. WHERE A PARAPET CONNECTION AT THE TRAILING END OF GUIDE RAIL IS SHOWN ON THE PLANS, THE POST SPACING REQUIREMENTS SHALL BE THE SAME AS THE APPROACH END OF THE PARAPET CONNECTION.
2. IN A FILL SECTION WHERE THE DISTANCE FROM THE BACK OF THE POST TO THE PVI IS LESS THAN 1' AND THE SLOPE IS STEEPER THAN 3:1, THE MINIMUM CLEARANCE FROM THE FACE OF THE RAIL TO AN OBSTRUCTION IS INCREASED BY 1' DUE TO INCREASED POST DEFLECTION.
3. A MINIMUM OF 12'-6" TANGENT SPACE IS REQUIRED BETWEEN THE FLARE AND THE OBSTRUCTION.
4. WHERE MINIMUM CLEARANCE FROM THE FRONT FACE OF W-BEAM GUIDE RAIL ELEMENT TO OBSTRUCTION CANNOT BE ACHIEVED, TRANSITION GUIDE RAIL TO CONCRETE BARRIER PROTECTION ALONG THE OBSTRUCTION WITH PRIOR APPROVAL BY THE AUTHORITY. SEE GR-15.
5. WHERE MASH APPROVED BREAKAWAY FEATURES SUCH AS LIGHT POLES OR GROUND MOUNTED SIGN SUPPORTS ARE LOCATED BEHIND GUIDE RAIL, THE MINIMUM CLEARANCE FROM THE FRONT FACE OF W-BEAM GUIDE RAIL ELEMENT TO THE NEAREST SIDE OF THE BREAKAWAY FEATURE MAY BE REDUCED TO 3'-6".

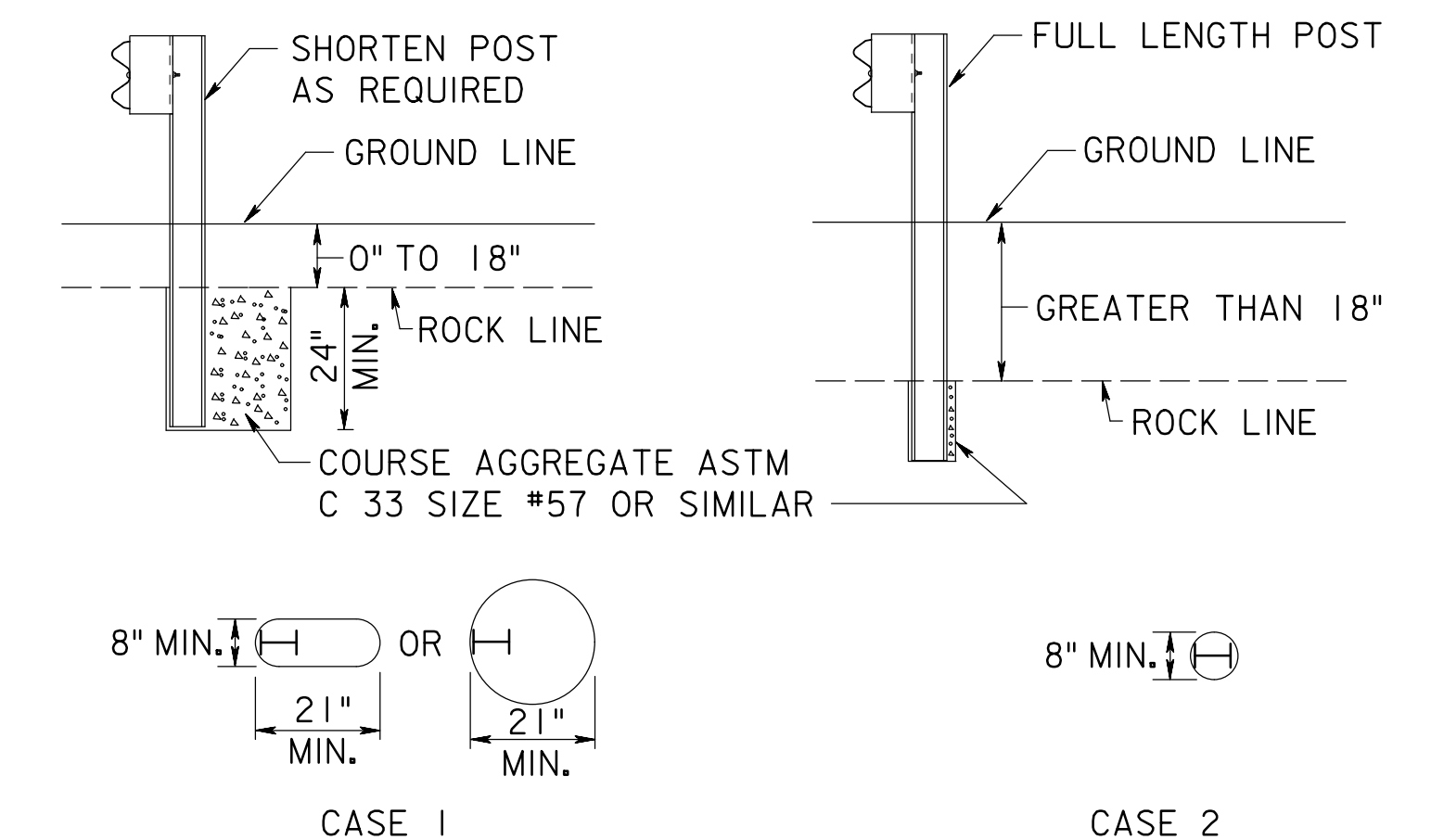
CLEARANCE FROM FACE OF RAIL TO OBSTRUCTION

WHERE DISTANCE FROM PVI TO BACK OF POST IS LESS THAN 2 FEET

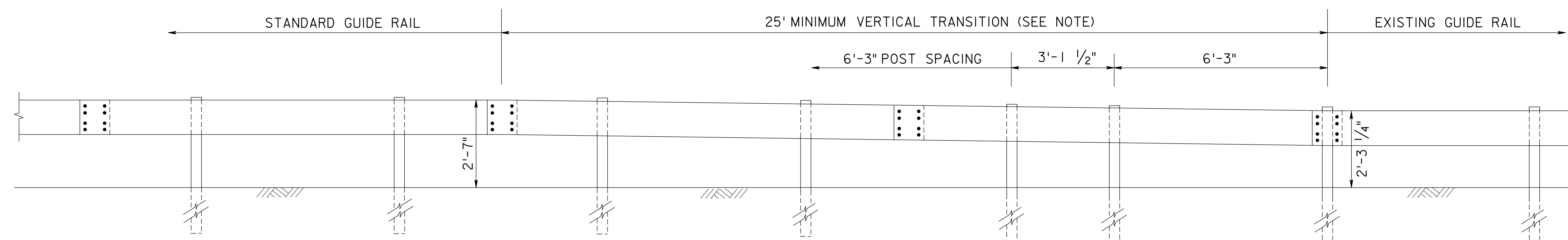
DISTANCE FROM BACK OF POST TO PVI	EMBANKMENT SLOPES	ADDITIONAL POST LENGTH
LESS THAN 2' BUT GREATER OR EQUAL TO 1'	6H:1V OR FLATTER	0
	STEEPER THAN 6H:1V TO 3H:1V	1'
LESS THAN 1' OR AT PVI	STEEPER THAN 3H:1V TO 2H:1V	2'
	6H:1V OR FLATTER	1'
	STEEPER THAN 6H:1V TO 3H:1V	2'
	STEEPER THAN 3H:1V TO 2H:1V	3'



ADDITIONAL LENGTH BEAM GUIDE RAIL POSTS



GUIDE RAIL POST INSTALLATION IN ROCK

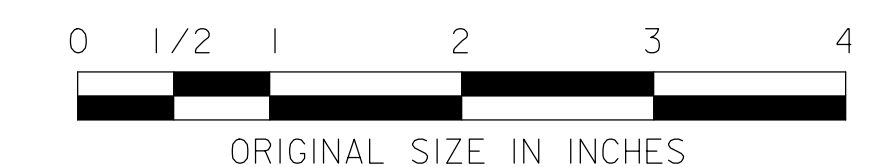


**NOTE:**

WHERE TRANSITIONING TO EXISTING GUIDE RAIL, AN END TERMINAL, PARAPET CONNECTOR OR A CRASH CUSHION MOUNTED AT A HEIGHT OTHER THAN 2'-7", THE VERTICAL TRANSITION SHALL BE ACCOMPLISHED IN A MINIMUM LENGTH OF 12'-6" FOR EACH 2" OF VERTICAL CHANGE. VERTICAL TRANSITION SHALL OCCUR ONE FULL RAIL ELEMENT PRIOR TO THE LIMITS OF EXISTING PARAPET CONNECTION OR END TREATMENT.

VERTICAL TRANSITION TO EXISTING NCHRP 350 (TL-3) HIGH BEAM GUIDE RAIL

MASH TL-3



NEW JERSEY TURNPIKE AUTHORITY  
**NEW JERSEY TURNPIKE GARDEN STATE PARKWAY**

STANDARD DRAWINGS

**BEAM GUIDE RAIL AND POST TREATMENTS**

OFFICE OF THE CHIEF ENGINEER  
NEW JERSEY TURNPIKE AUTHORITY  
WOODBRIIDGE, NEW JERSEY

STANDARD DRAWING

**GR-10**

REV.	DESCRIPTION	DATE
0	ORIGINAL DRAWING	07/21