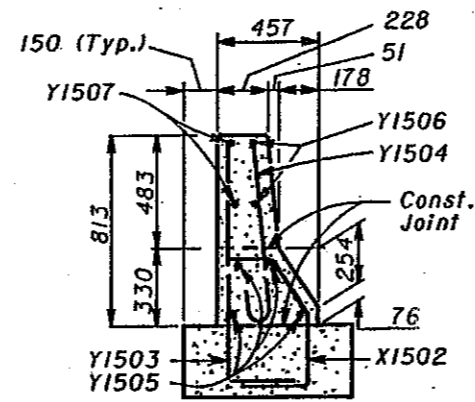
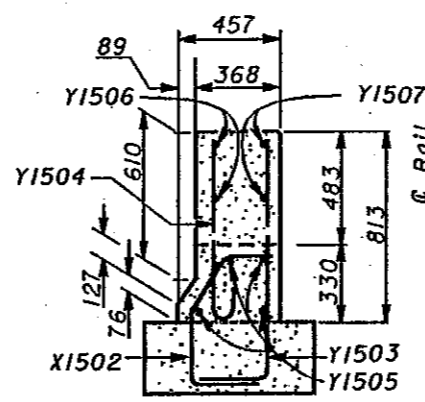


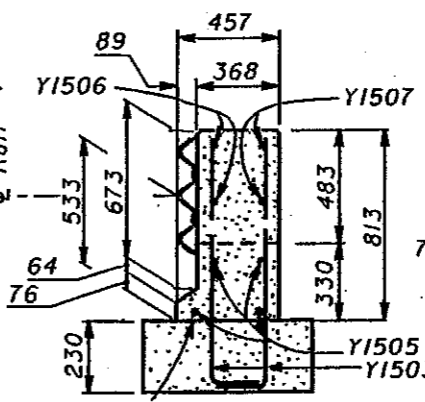
PLAN



SECTION C-C

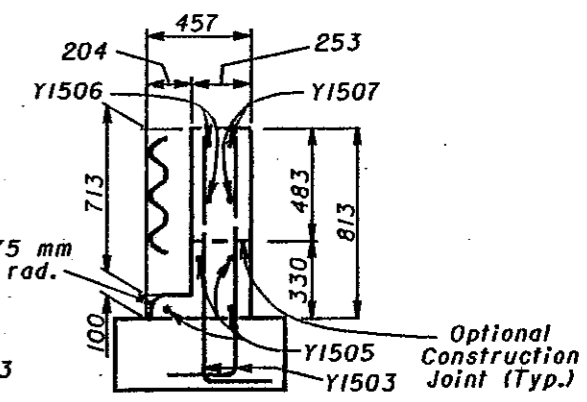


SECTION D-D



Construction Joint (Typ.)

SECTION E-E

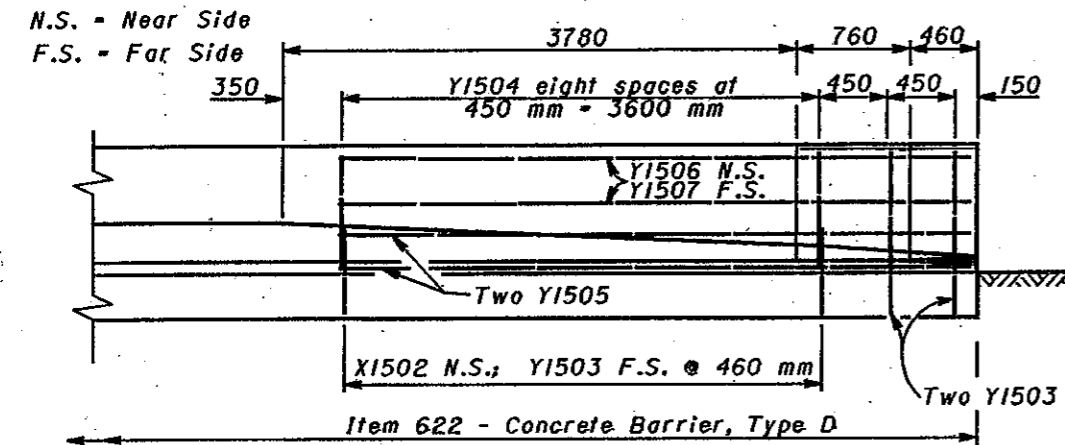


SECTION F-F

Optional Construction Joint (Typ.)

REINFORCING BAR LIST

MARK	LENGTH (mm)	SHAPE	NO.	MASS (kg)
X1502	850	Bent	9	12
Y1503	1120	Bent	13	23
Y1504	880	Bent	9	13
Y1505	4900	Str.	4	31
Y1506	4900	Bent	2	15
Y1507	4900	Str.	2	15
TOTAL MASS (For Info. only)				109



SECTION A-A

LOCATION: Concrete barrier at obstructions shall be constructed with the toe of the barrier slope at the normal guardrail offset from the roadway. Installations within continuous runs shall be constructed so that no approach or trailing guardrail tapers are required to connect to the barrier.

Installations which cannot be constructed at the normal guardrail offset and are to be connected to approach or trailing guardrail runs shall have a 25:1 guardrail taper to meet the existing or normal guardrail offset.

Installations which are not to be connected to approach or trailing guardrail runs shall include the standard guardrail flare as per Std. Constr. Dwg. GR-5.1M.

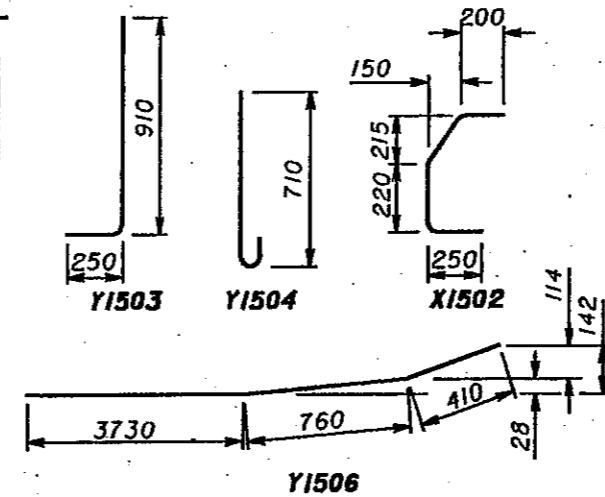
INCORPORATED INSTALLATIONS: For barrier installations which cannot be constructed at the normal guardrail offset, the incorporated installations shown may be installed at vertical walls, piers or other similar obstructions. For pier-incorporated installations the contractor may use the optional treatment, forming the back face of the Type D Concrete Barrier to the location shown (between piers only), with any additional cost being included in the cost of Item 622.

REINFORCING: All reinforcing bars shall be epoxy coated

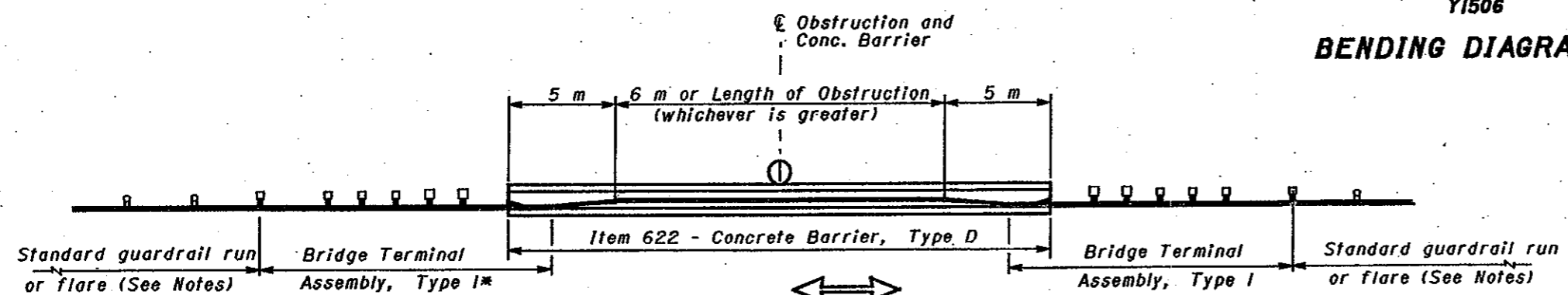
MISCELLANEOUS: For Bridge Terminal Assembly, Type 1 and 2 details and connections, see GR-3.1M and GR-3.2M. For Type D Concrete Barrier details see RM-4.3M.

PAYMENT: Payment for Item 622, Concrete Barrier, Type D shall include all materials, labor and reinforcing steel required to construct the barrier as shown.

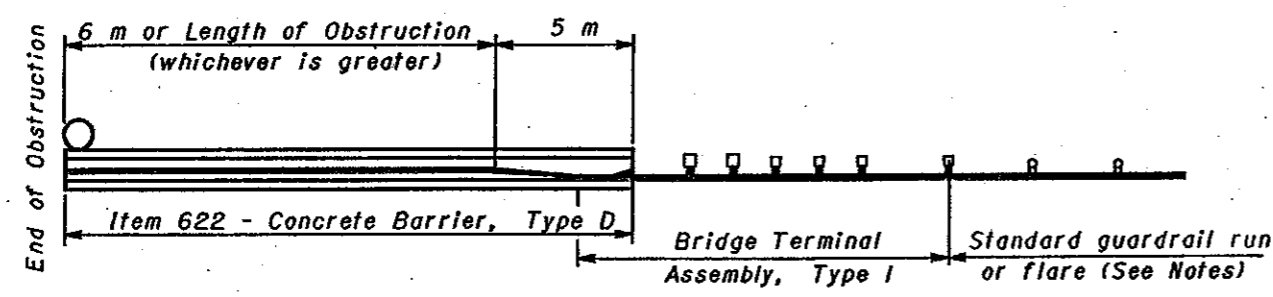
All dimensions are in millimeters unless otherwise noted.



BENDING DIAGRAMS

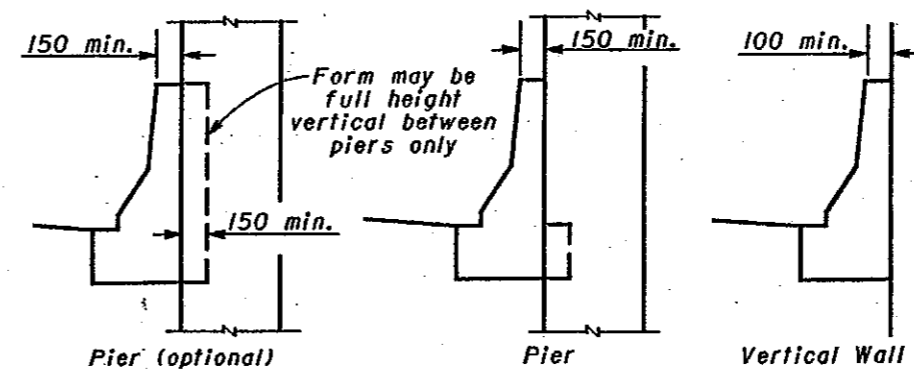


Bi-directional Travel or Directional Travel where trailing guardrail is used.



Directional Travel where no trailing guardrail is used.

TYPICAL INSTALLATIONS



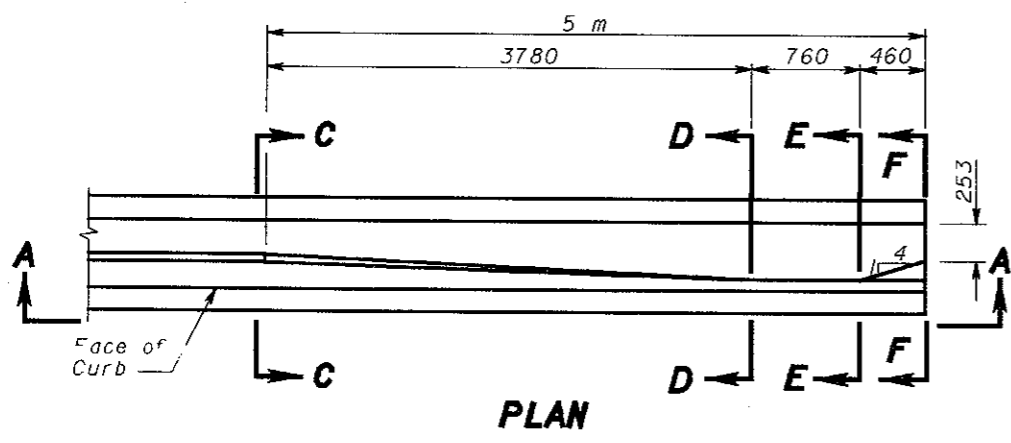
INCORPORATED INSTALLATIONS



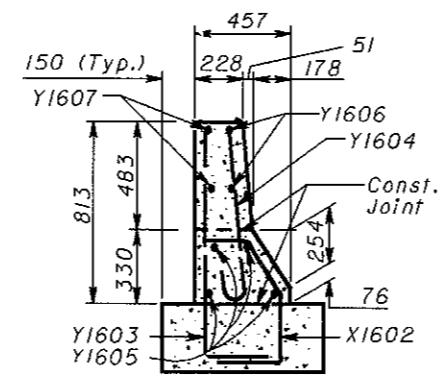
This Drawing Replaces GR-8.1.

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
CONCRETE BARRIER AT OBSTRUCTIONS	
STANDARD CONSTRUCTION DRAWING	DATE 6-30-95
APPROVED <i>W. K. Johnson</i> ENGR., L & D	

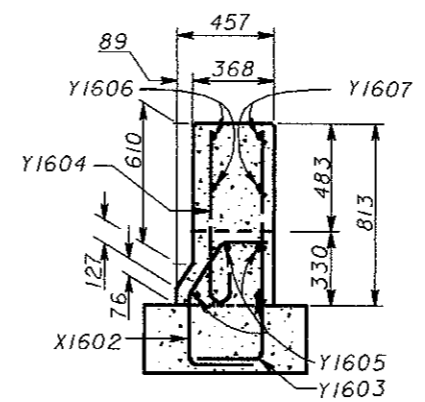
* Bridge Terminal Assembly, Type 2 shall be used for directional roadways where trailing guardrail is used and is out of the clear zone of opposite direction traffic.



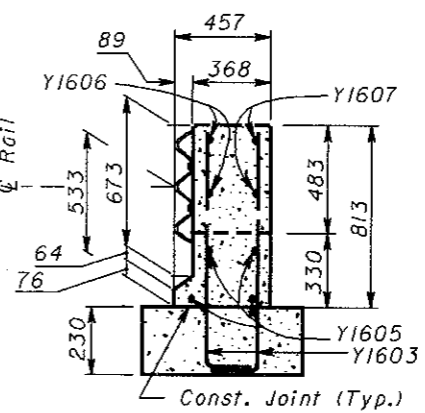
PLAN



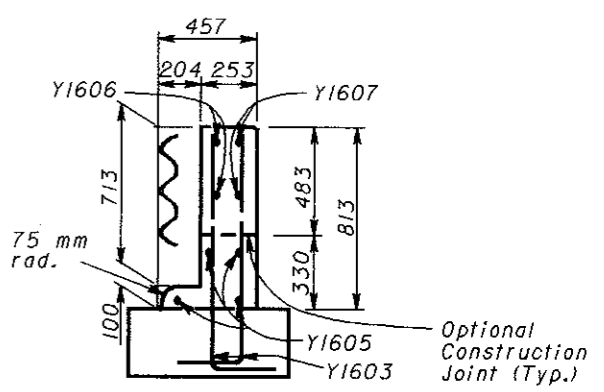
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

NOTES

LOCATION: Concrete barrier at obstructions shall be constructed with the toe of the barrier slope at the normal guardrail offset from the roadway. Installations within continuous runs shall be constructed so that no approach or trailing guardrail tapers are required to connect to the barrier.
 Installations that cannot be constructed at the normal guardrail offset and are to be connected to approach or trailing guardrail runs shall have a 25:1 guardrail taper to meet the existing or normal guardrail offset.
 Installations that are not to be connected to approach or trailing guardrail runs shall include the standard guardrail flare as per SCD GR-5.1M.

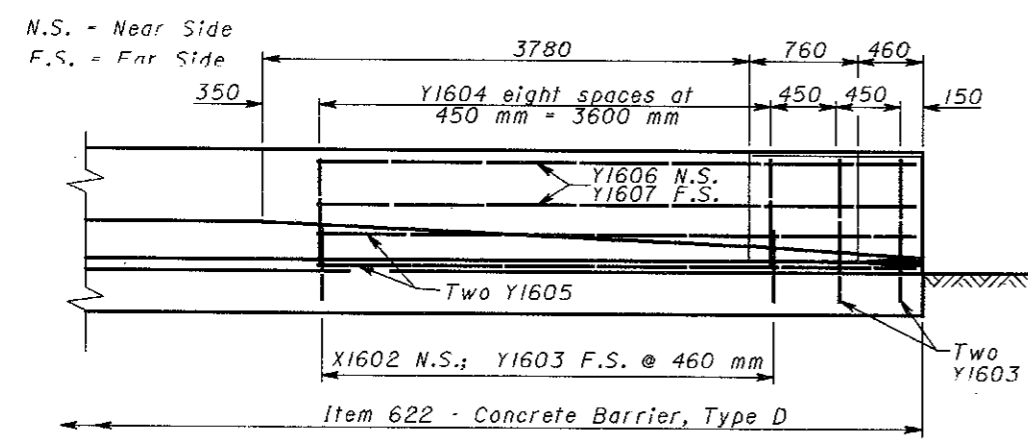
INCORPORATED INSTALLATIONS: For barrier installations that cannot be constructed at the normal guardrail offset, the incorporated installations shown may be installed at vertical walls, piers or other similar obstructions. For pier-incorporated installations the contractor may use the optional treatment, forming the back face of the Type D Concrete Barrier to the location shown (between piers only), with any additional cost being included in the cost of Item 622.

REINFORCING: All reinforcing bars shall be epoxy coated and shall meet the requirements of CMS 509.

MISCELLANEOUS: For Bridge Terminal Assembly, Type 1 and Type 2 details and connections, see SCD's GR-3.1M and GR-3.2M, respectively. For Type D Concrete Barrier details see SCD RM-4.3M.

PAYMENT: Payment for Item 622, Concrete Barrier, Type D shall include all materials, labor and reinforcing steel required to construct the barrier as shown.

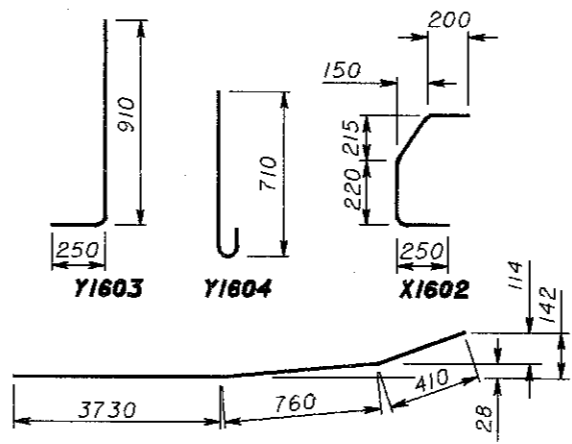
All dimensions are in millimeters unless otherwise noted.



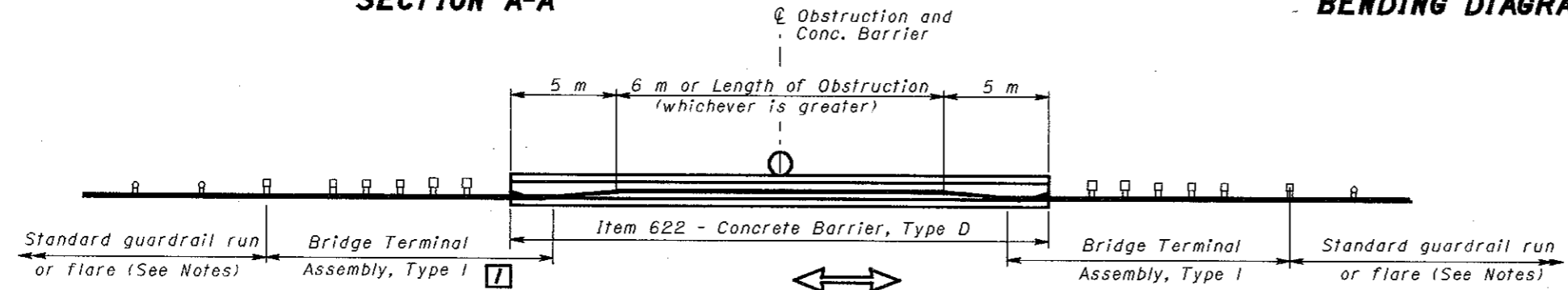
SECTION A-A

REINFORCING BAR LIST

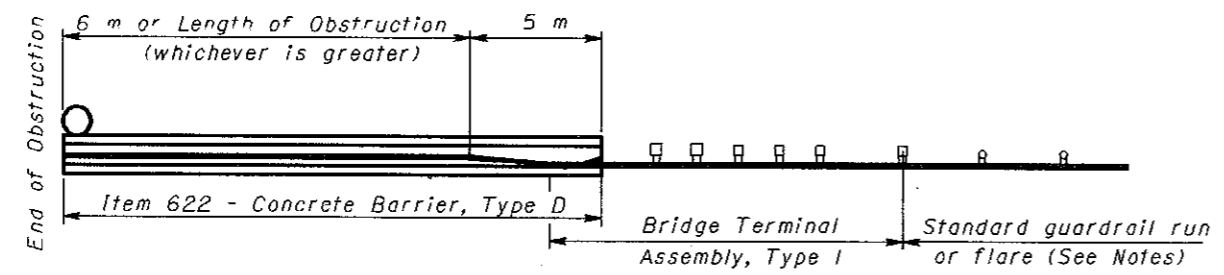
MARK	LENGTH (mm)	SHAPE	NO.	MASS (kg)
X1602	850	Bent	9	12
Y1603	1120	Bent	13	23
Y1604	880	Bent	9	13
Y1605	4900	Str.	4	31
Y1606	4900	Bent	2	15
Y1607	4900	Str.	2	15
TOTAL MASS (For Info. only)				109



BENDING DIAGRAMS

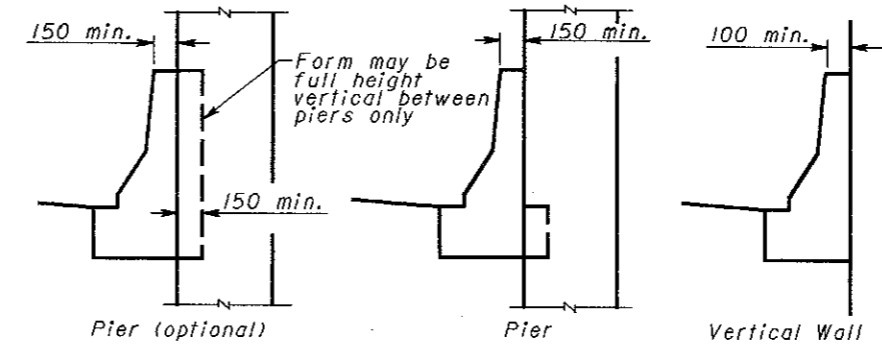


Bi-directional Travel or Directional Travel where trailing guardrail is used.



Directional Travel where no trailing guardrail is used.
TYPICAL INSTALLATIONS

T Bridge Terminal Assembly, Type 2 shall be used for directional roadways where trailing guardrail is used and is out of the clear zone of opposite direction traffic.



INCORPORATED INSTALLATIONS



This Drawing Replaces GR-8.J.

OHIO DEPARTMENT OF TRANSPORTATION	
CONCRETE BARRIER AT OBSTRUCTIONS	DATE 6-30-95 10-21-97
STANDARD CONSTRUCTION DRAWING RM-4.5M	APPROVED <i>[Signature]</i>