

STANDARD BARRICADES AND GATES

NOTES

LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, or other materials approved by the Engineer, surfaced on four sides standard.

POSTS shall be 6" x 6" sawed or 8" rounded posts and shall conform to 710.12.

CHAINS. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 5/8" stock with welded links. Barricades shall be constructed according to details shown. Rails of the barricade shall be bolted to the posts with 5/8" bolts.

The barricade shall provide an opening of a minimum width of 24 feet. For pavement widths greater than 20 feet minimum open width shall be the pavement width plus four (4) feet. Where erected on divided pavements the barricade shall effectively close the median opening.

PAINTING & REFLECTORIZATION. The top rails of the barricades shall be reflectorized with 5" stripes of white reflective sheeting alternated with 5" stripes of black paint; stripes shall be on a 45° angle sloping toward the center line of the roadway.

Alternate 5" black and white painted stripes shall be applied to all remaining rails at a 45° angle sloping toward the center line of the roadway.

When traffic is maintained the top rails of the barricade shall provide the above described reflectorization at both front and back, and the bottom rails painted as described above. Three yellow reflector units 3" in diameter spaced on 4-1/2" centers shall be mounted on both sides of the posts nearest the pavement edges, as shown.

GATES. The movable gate shall be constructed according to the details shown. Alternate 5" stripes shall be applied on all three rails at a 45° angle, and shall be black and white in color. The top rail shall be reflectorized with 5" stripes of white reflective sheeting alternate with 5" stripes of black paint. One gate shall be erected for each traffic lane. The gates shall be well spiked, using spikes long enough to clinch.

The hinged gate may be used and shall be an approved farm type having 12' length, 48" height, with steel frame or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with lumber 1" nominal thickness or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

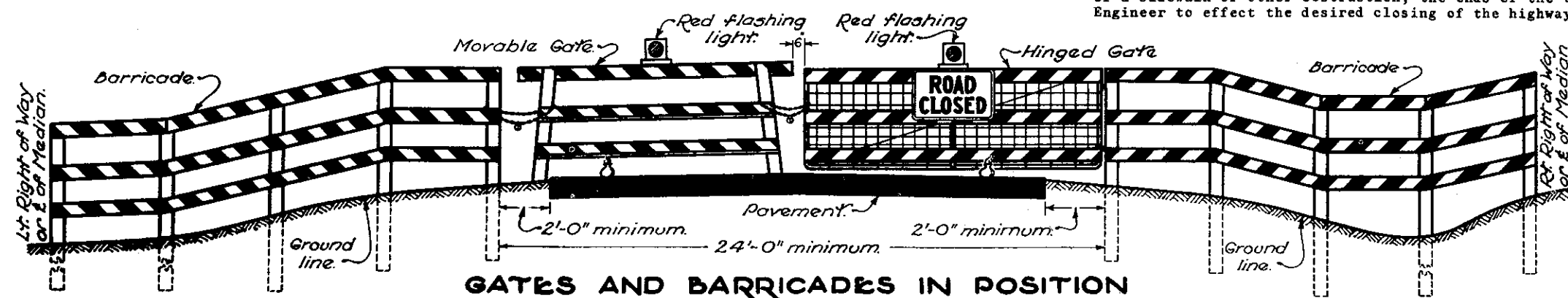
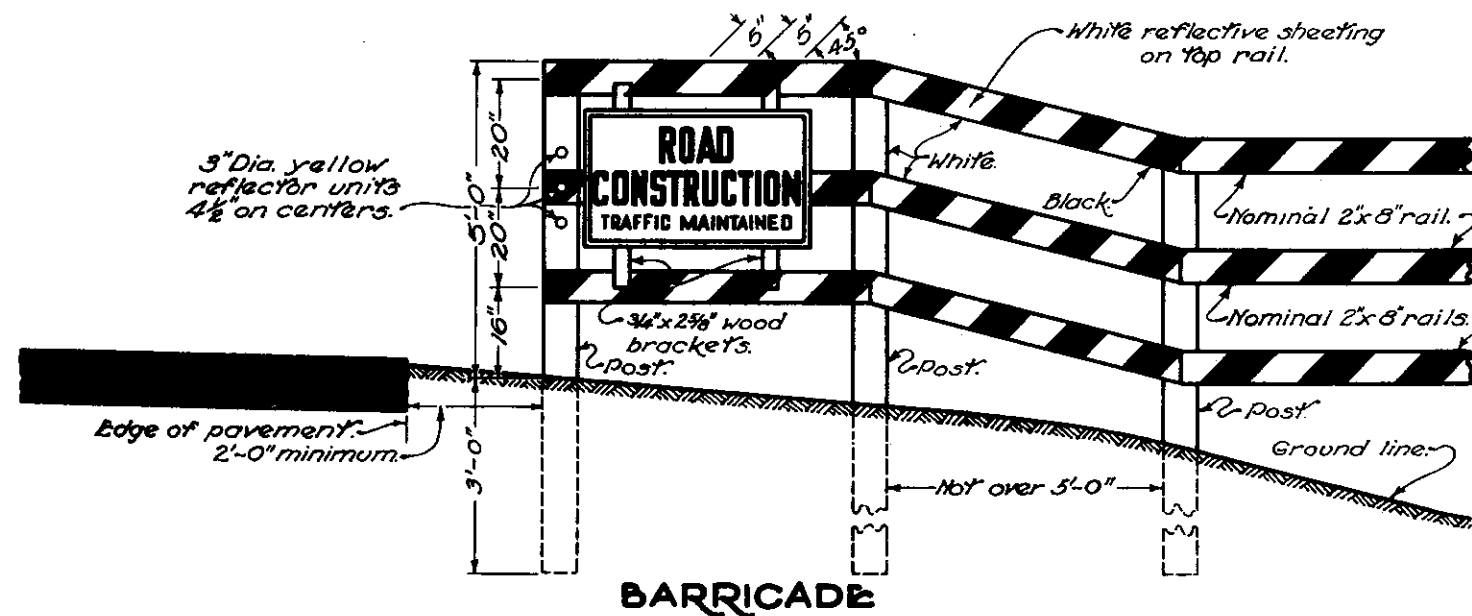
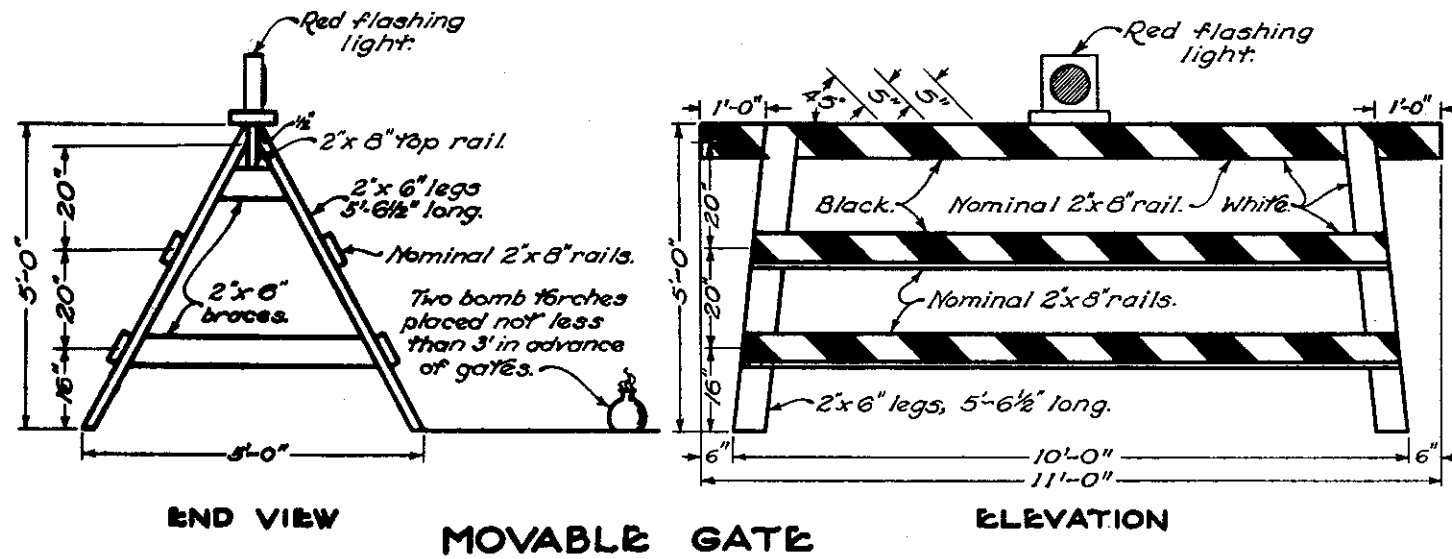
RED LIGHT. Each gate shall be equipped with a red light with minimum lens diameter of 6". The optical unit consisting of lens, reflector, and light source shall be enclosed in and securely held in place by the housing. The optical unit shall be monodirectional. The rate of flash shall be 50 to 70 flashes per minute and the "on" time shall be at least 25 percent of the time. During hours of darkness, the flash shall be bright enough to be conspicuously visible at all distances up to 800 feet from the unit under normal atmospheric conditions. Flasher may be operated by battery, electric generator, commercial power, or propane gas.

Red flasher shall be in operation at all times that the gates close the roadway.

SIGNS. Upon the erection of the gates and barricades, according to the above standards, the Division Traffic Engineer will furnish a ROAD CLOSED sign, size 48" x 30" which will be mounted on the gate as shown. When three gates are used for closing three-lane roads, the sign shall be mounted on the middle gate facing traffic approaching the closed section.

Where traffic is maintained a ROAD CONSTRUCTION TRAFFIC MAINTAINED sign, size 48" x 30" will be furnished for mounting on the barricade at the right-hand side of the roadway adjacent to the pavement, facing traffic approaching the construction section. An END OF CONSTRUCTION sign, size 48" x 30" shall be mounted on the barricade at the right hand side of the road facing traffic leaving the construction section.

MODIFIED DESIGN. The barricade shown hereon is primarily for use in rural areas. In urban areas and at locations where it is impracticable to extend the barricade to the right of way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.



BUREAU OF LOCATION AND DESIGN
 OHIO DEPARTMENT OF HIGHWAYS

DATE
 6-1-65

BARRICADES AND GATES

STANDARD CONSTRUCTION DRAWING **MC-3**

APPROVED: *R. D. BENT* ENGR. L. & D.

STANDARD BARRICADES AND GATES

NOTES

LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, or other materials approved by the Engineer, surfaced on four sides standard

POSTS shall be sound 6" x 6" sawed or 8" round.

CHAINS. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 5/8" stock with welded links.

Barricades shall be constructed according to details shown. Rails of the barricade shall be bolted to the posts with 5/8" bolts.

The barricade shall provide an opening of a minimum width of 24 feet. For pavement widths greater than 20 feet minimum open width shall be the pavement width plus four (4) feet. Where erected on divided pavements the barricade shall effectively close the median opening.

PAINTING & REFLECTORIZATION. The top rails of the barricades shall be reflectorized with 5" stripes of white reflective sheeting alternated with 5" stripes of black paint; stripes shall be on a 45° angle sloping toward the center line of the roadway.

Alternate 5" black and white painted stripes shall be applied to all remaining rails at a 45° angle sloping toward the center line of the roadway.

When traffic is maintained the top rails of the barricade shall provide the above described reflectorization at both front and back, and the bottom rails painted as described above. Three yellow reflector units 3" in diameter spaced on 4-1/2" centers shall be mounted on both sides of the posts nearest the pavement edges, as shown.

GATES. The movable gate shall be constructed according to the details shown. Alternate 5" stripes shall be applied on all three rails at a 45° angle, and shall be black and white in color. The top rail shall be reflectorized with 5" stripes of white reflective sheeting alternate with 5" stripes of black paint. One gate shall be erected for each traffic lane. The gates shall be well spiked, using spikes long enough to clinch.

The hinged gate may be used and shall be an approved farm type having 12' length, 48" height, with steel frame or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with lumber 1" nominal thickness or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

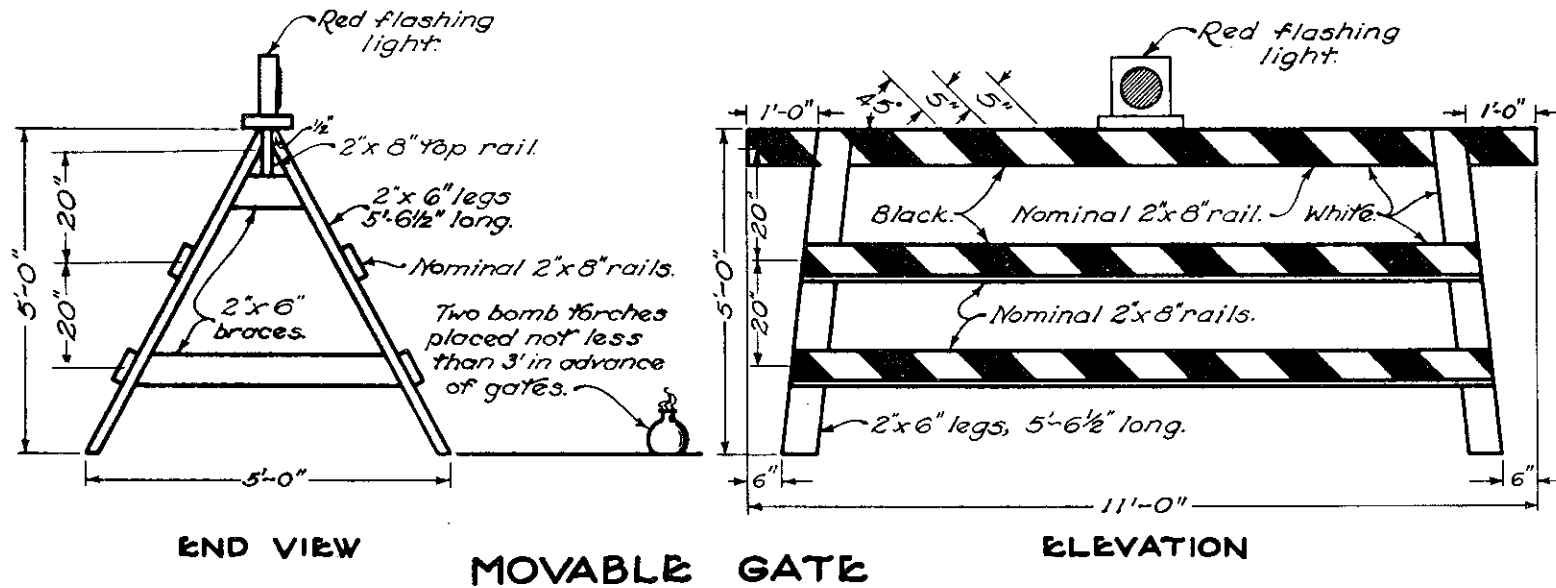
RED LIGHT. Each gate shall be equipped with a red light with minimum lens diameter of 6". The optical unit consisting of lens, reflector, and light source shall be enclosed in and securely held in place by the housing. The optical unit shall be monodirectional. The rate of flash shall be 50 to 70 flashes per minute and the "on" time shall be at least 25 percent of the time. During hours of darkness, the flash shall be bright enough to be conspicuously visible at all distances up to 800 feet from the unit under normal atmospheric conditions. Flasher may be operated by battery, electric generator, commercial power, or propane gas.

Red flasher shall be in operation at all times that the gates close the roadway.

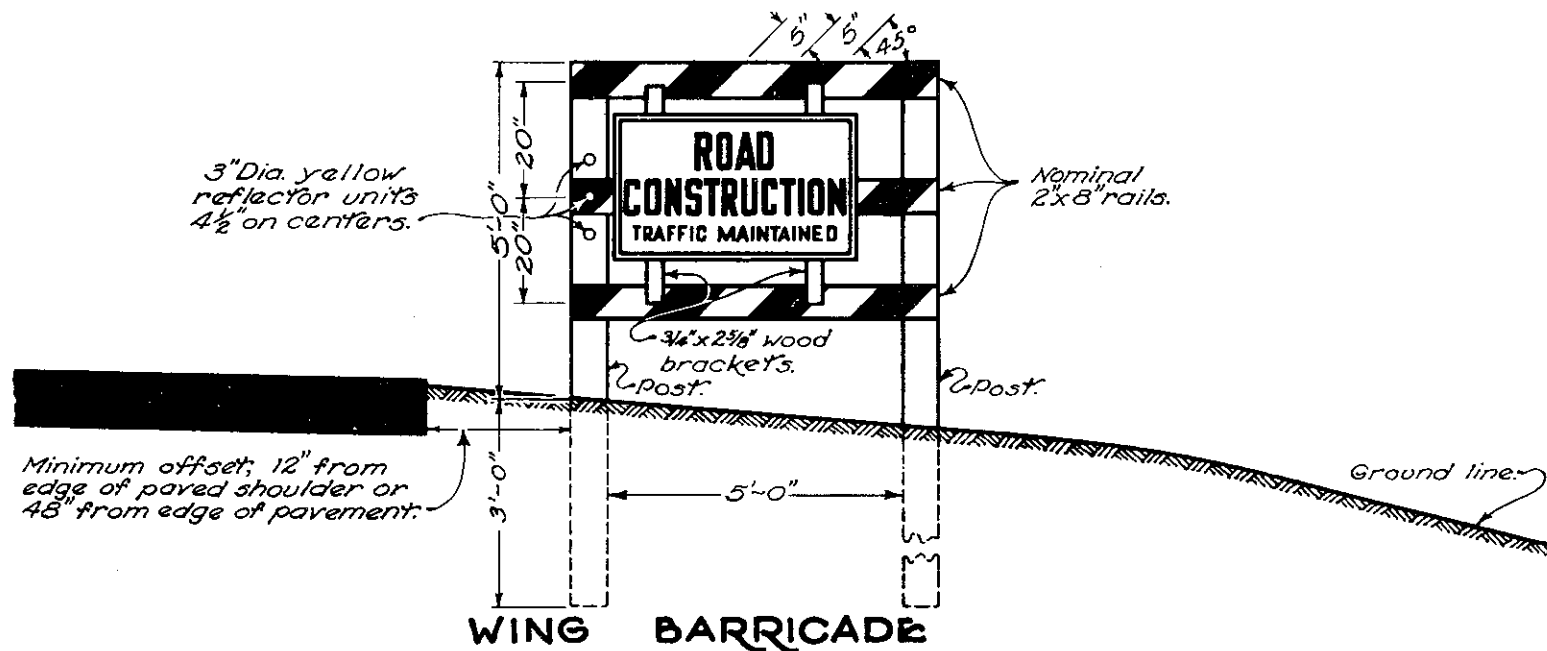
SIGNS. Upon the erection of the gates and barricades, according to the above standards, the Division Traffic Engineer will furnish a ROAD CLOSED sign, size 48" x 30" which will be mounted on the gate as shown. When three gates are used for closing three-lane roads, the sign shall be mounted on the middle gate facing traffic approaching the closed section.

Where traffic is maintained a ROAD CONSTRUCTION TRAFFIC MAINTAINED sign, size 48" x 30" will be furnished for mounting on the barricade at the right-hand side of the roadway adjacent to the pavement, facing traffic approaching the construction section. An END OF CONSTRUCTION sign, size 48" x 30" shall be mounted on the barricade at the right hand side of the road facing traffic leaving the construction section.

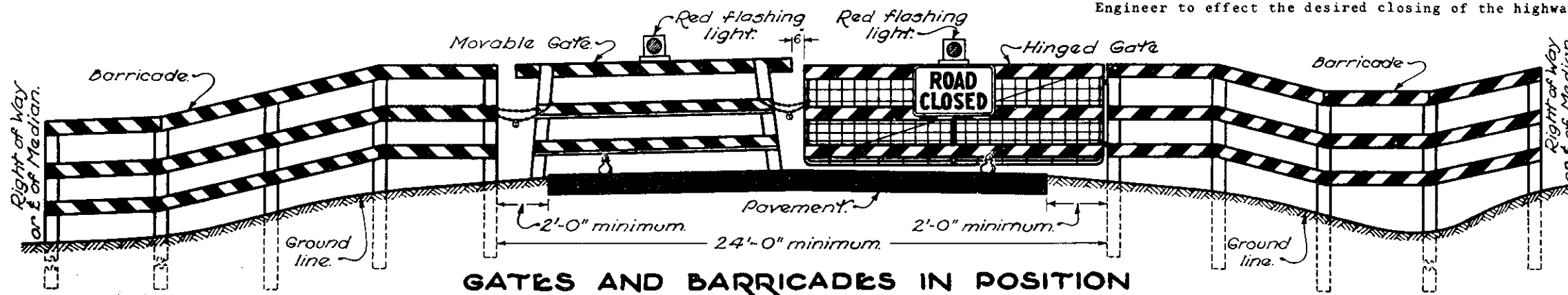
MODIFIED DESIGN. The barricade shown hereon is primarily for use in rural areas. In urban areas and at locations where it is impracticable to extend the barricade to the right of way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.



MOVABLE GATE



WING BARRICADE



GATES AND BARRICADES IN POSITION

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF HIGHWAYS

**BARRICADES
AND GATES**

STANDARD
CONSTRUCTION
DRAWING
APPROVED *[Signature]* ENGR. L. & D.

DATE
6-1-65
5-1-66

MC-3

STANDARD BARRICADES AND GATES

NOTES

LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, or other materials approved by the Engineer, surfaced on four sides standard.

POSTS shall be sound 4" x 4" sawed or 4½" round.

CHAINS. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 5/8" stock with welded links.

BARRICADES shall be constructed according to details shown. Rails of the barricade shall be bolted to the posts with 5/8" bolts.

The barricade shall provide an opening of a minimum width of 24 feet. For pavement widths greater than 20 feet minimum open width shall be the pavement width plus four (4) feet. Where erected on divided pavements the barricade shall effectively close the median opening.

PAINTING & REFLECTORIZATION. The top rails of the barricades shall be reflectorized with 5" stripes of white reflective sheeting alternated with 5" stripes of black paint; stripes shall be on a 45° angle sloping toward the center line of the roadway.

Alternate 5" black and white painted stripes shall be applied to all remaining rails at a 45° angle sloping toward the center line of the roadway.

When traffic is maintained the top rails of the barricade shall provide the above described reflectorization at both front and back, and the bottom rails painted as described above. Three yellow reflector units 3" in diameter spaced on 4½" centers shall be mounted on both sides of the posts nearest the pavement edges, as shown.

GATES. The movable gate shall be constructed according to the details shown. Alternate 5" stripes shall be applied on all three rails at a 45° angle, and shall be black and white in color. The top rail shall be reflectorized with 5" stripes of white reflective sheeting alternate with 5" stripes of black paint. One gate shall be erected for each traffic lane. The gates shall be well spiked, using spikes long enough to clinch.

The hinged gate may be used and shall be an approved farm type having 12' length, 48" height, with steel frame or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with lumber 1" nominal thickness or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

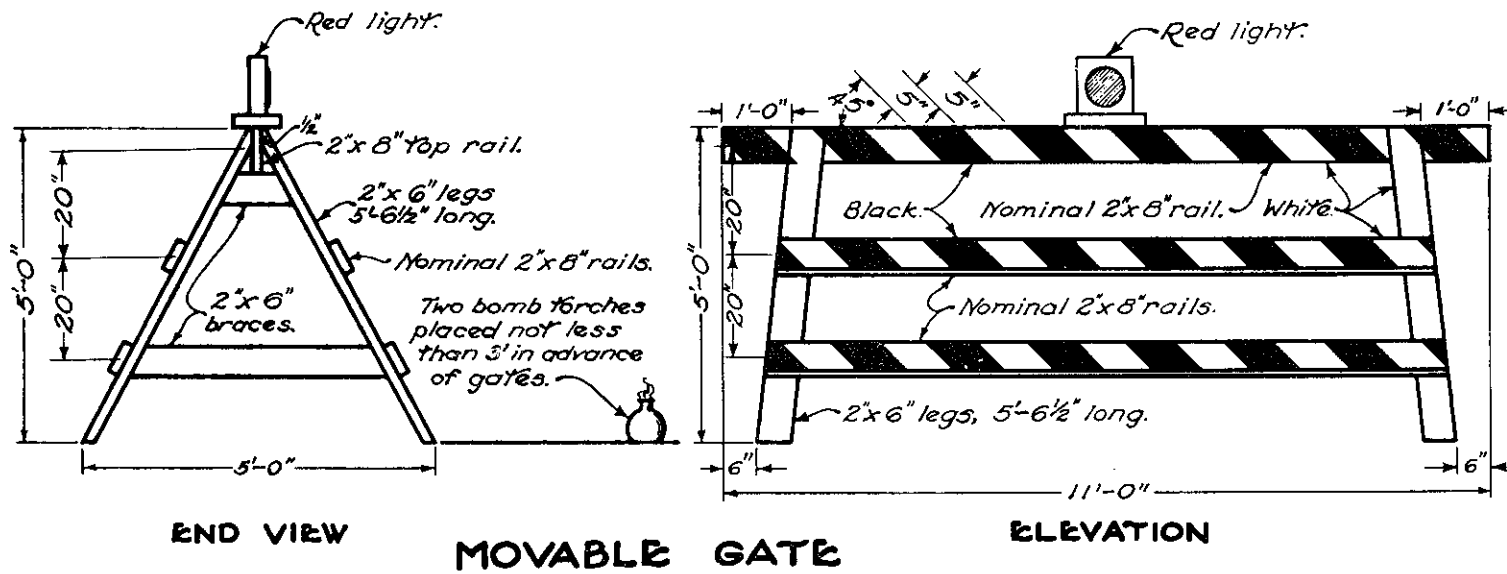
RED LIGHT. Each gate shall be equipped with a steady burning red light. During the hours of darkness, the red light shall be bright enough to be conspicuously visible at all distances up to 800 feet from the unit under normal atmospheric conditions. The red light may be operated by battery, electric generator, commercial power, or propane gas.

The red light shall be in operation at all times that the gates close the roadway.

SIGNS. Upon the erection of the gates and barricades, according to the above standards, a ROAD CLOSED sign, size 48" x 30" shall be mounted on the gate as shown. When three gates are used for closing three-lane roads, the sign shall be mounted on the middle gate facing traffic approaching the closed section.

Where traffic is maintained a ROAD CONSTRUCTION TRAFFIC MAINTAINED sign, size 48" x 30" shall be mounted on the barricade at the right-hand side of the roadway adjacent to the pavement, facing traffic approaching the construction section. An END OF CONSTRUCTION sign, size 48" x 30" shall be mounted on the barricade at the right hand side of the road facing traffic leaving the construction section.

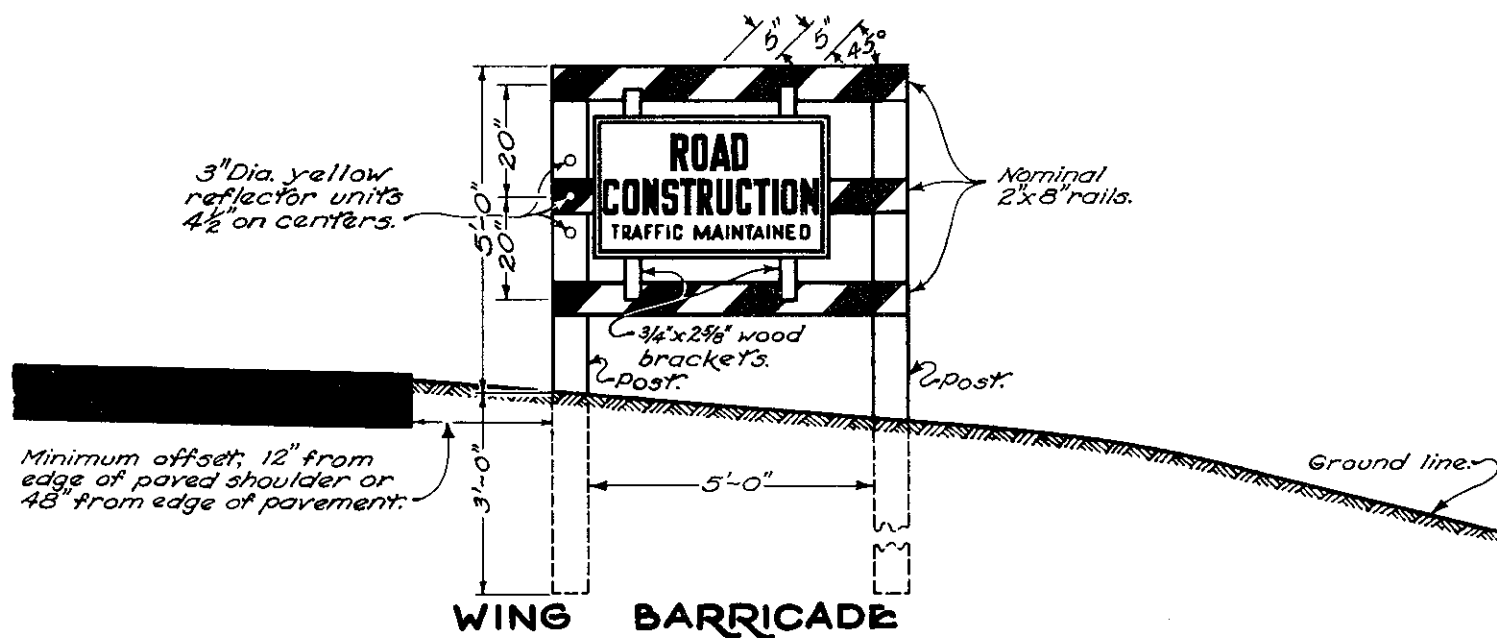
MODIFIED DESIGN. The barricade shown hereon is primarily for use in rural areas. In urban areas and at locations where it is impracticable to extend the barricade to the right-of-way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.



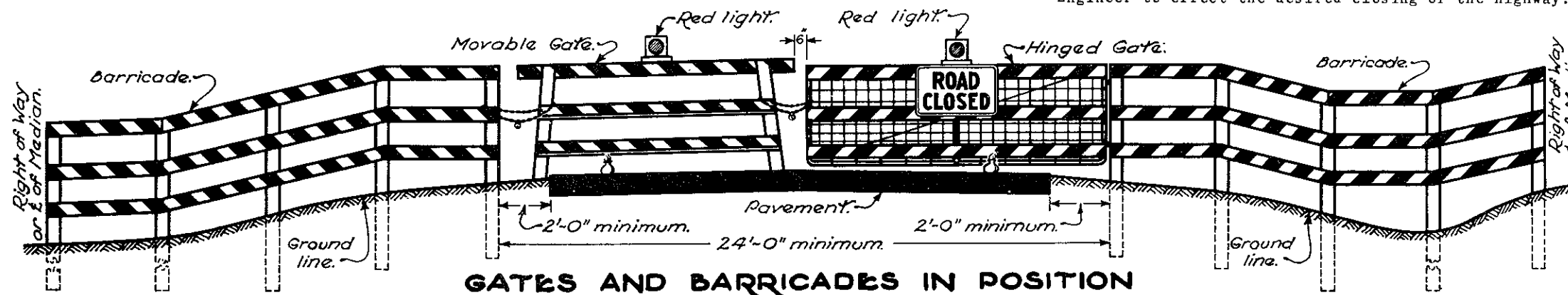
END VIEW

MOVABLE GATE

ELEVATION



WING BARRICADE

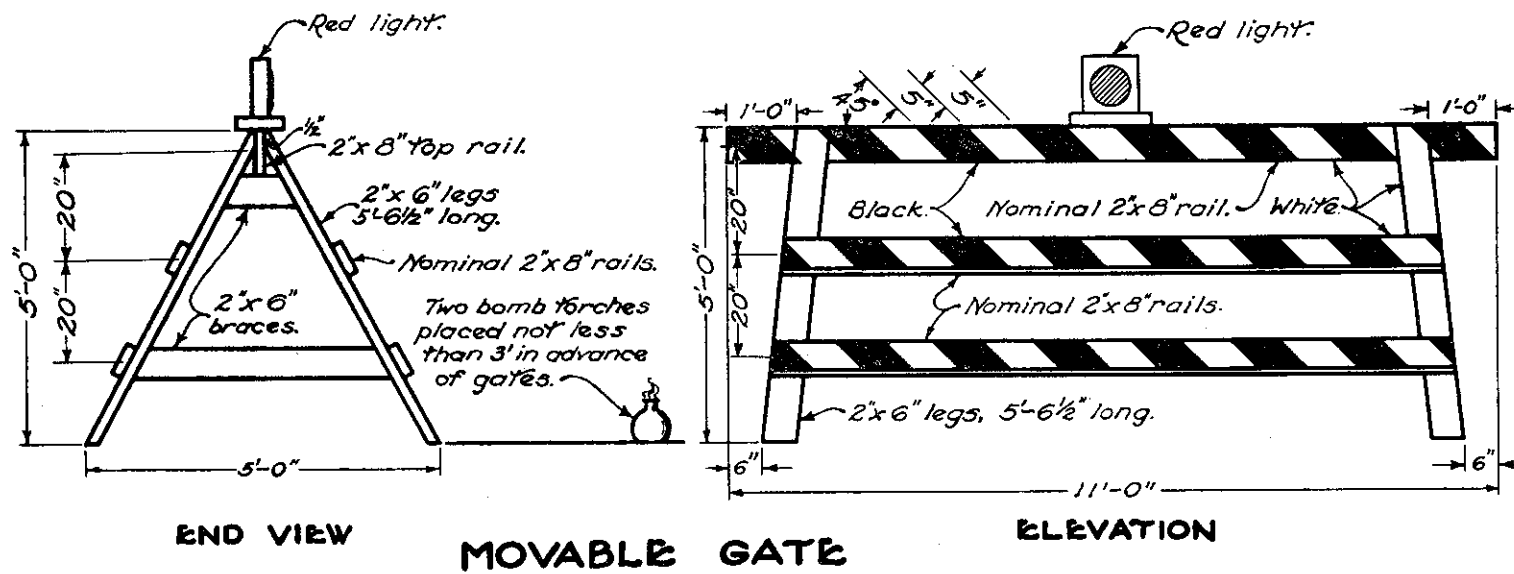


GATES AND BARRICADES IN POSITION

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF HIGHWAYS	
BARRICADES AND GATES	
DATE 6-1-65 5-1-66 11-1-68	
STANDARD CONSTRUCTION DRAWING MC-3	
APPROVED <i>[Signature]</i> ENGR. L. & D.	

STANDARD BARRICADES AND GATES

NOTES



LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, or other materials approved by the Engineer, surfaced on four sides standard.

POSTS shall be sound 4" x 4" sawed or 4 1/2" round.

CHAINS. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 5/8" stock with welded links.
Barricades shall be constructed according to details shown. Rails of the barricade shall be bolted to the posts with 5/8" bolts.

The barricade shall provide an opening of a minimum width of 24 feet. For pavement widths greater than 20 feet minimum open width shall be the pavement width plus four (4) feet. Where erected on divided pavements the barricade shall effectively close the median opening.

PAINING & REFLECTORIZATION. All rails of the barricades shall be reflectorized with 5" stripes of white reflective sheeting alternated with 5" stripes of black paint; stripes shall be on a 45° angle sloping downward toward the center line of the roadway.

When traffic is maintained the top rail of the barricade shall provide the above described treatment on both front and back, and the other rails on the front only. Three yellow reflector units 3" in diameter spaced on 4 1/2" centers shall be mounted on both sides of the posts nearest the pavement edges, as shown.

GATES. The movable gate shall be constructed according to the details shown. One gate shall be erected for each traffic lane. The gates shall be well spiked, using spikes long enough to clinch.

A hinged gate may be used and shall be an approved farm type having 12' length, 48" height, with steel frame or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with lumber 1" nominal thickness or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

All rails shall be reflectorized, front and back with 5" stripes of white reflective sheeting alternated with 5" stripes of black paint; stripes shall be on a 45° angle sloping downward toward the center of the gate opening.

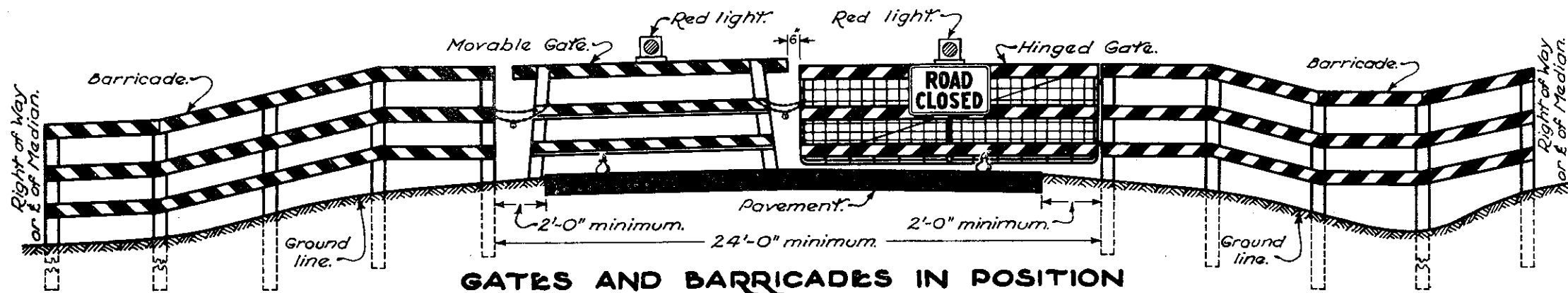
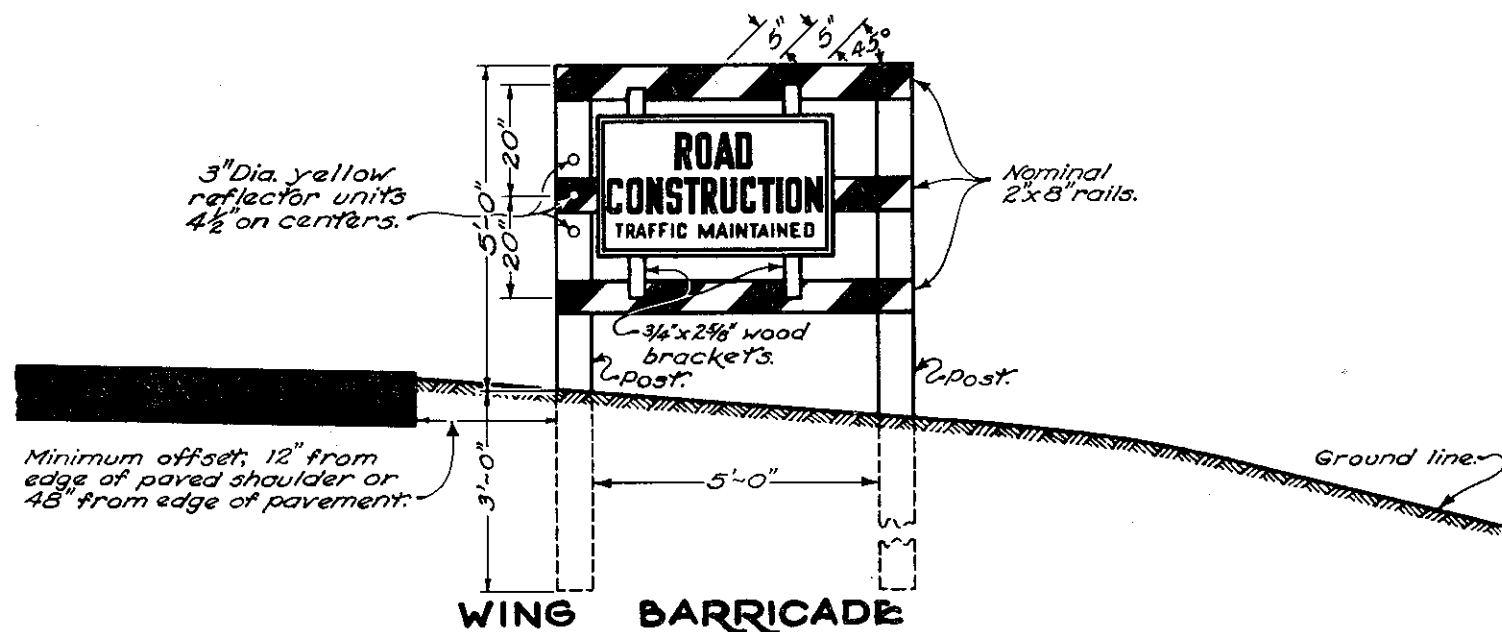
RED LIGHT. Each gate shall be equipped with a steady burning red light. During the hours of darkness, the red light shall be bright enough to be conspicuously visible at all distances up to 800 feet from the unit under normal atmospheric conditions. The red light may be operated by battery, electric generator, commercial power, or propane gas.

The red light shall be in operation at all times between sunset and sunrise during the period the highway is closed.

SIGNS. Upon the erection of the gates and barricades, according to the above standards, a ROAD CLOSED sign, size 48" x 30" shall be mounted on the gate as shown. When three gates are used for closing three-lane roads, the sign shall be mounted on the middle gate facing traffic approaching the closed section.

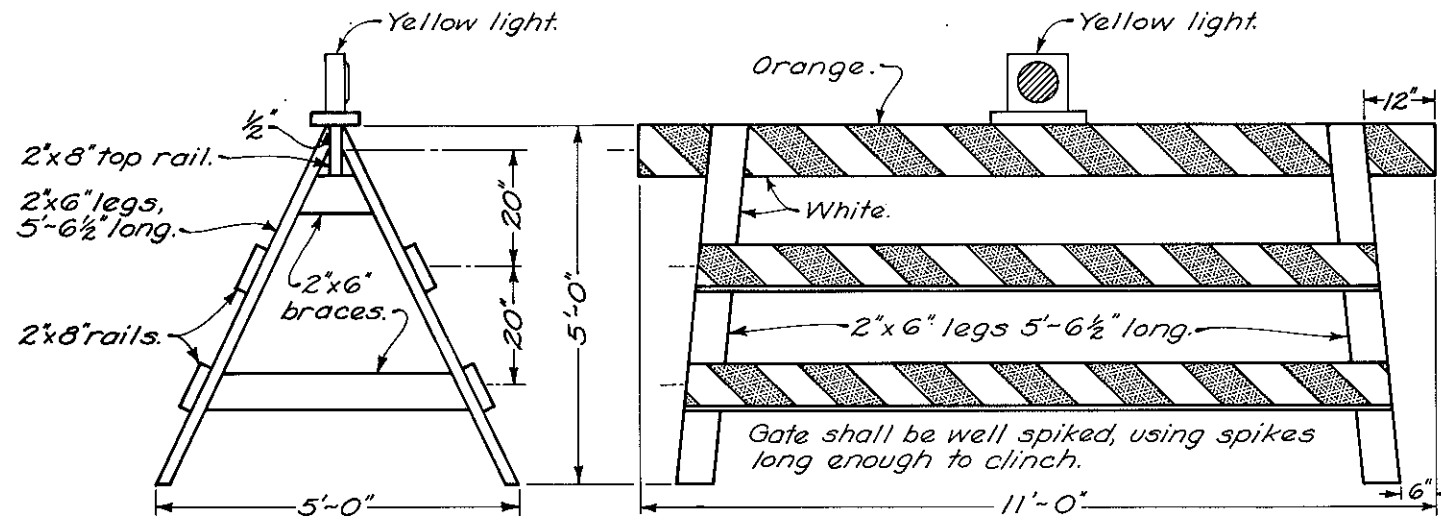
Where traffic is maintained a ROAD CONSTRUCTION TRAFFIC MAINTAINED sign, size 48" x 30" shall be mounted on the barricade at the right-hand side of the roadway adjacent to the pavement, facing traffic approaching the construction section. An END OF CONSTRUCTION sign, size 48" x 30" shall be mounted on the barricade at the right hand side of the road facing traffic leaving the construction section.

MODIFIED DESIGN. The barricade shown hereon is primarily for use in rural areas. In urban areas and at locations where it is impracticable to extend the barricade to the right-of-way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.



BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF HIGHWAYS	
DATE 6-1-65 5-1-66 11-1-68 6-20-69	
BARRICADES AND GATES	
STANDARD CONSTRUCTION DRAWING	MC-3
APPROVED <i>R.E. Callahan</i> ENGR. L. & D.	

MOVABLE GATE



NOTES

BARRICADES shall be constructed according to details shown. Where traffic is maintained during construction, wing barricades shall be used on each shoulder: (1) at both ends of the project, (2) on all interchange entrance ramps or on the cross road preceding the entrance ramp, (3) on all other major approach roads as directed by the Engineer. When the road is closed to traffic, barricades and gates shall be used to effectively close the entire roadway including the median of divided highways. In urban areas and at locations where it is impracticable to extend the barricade to the right-of-way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.

YELLOW LIGHT: Each gate shall be equipped with a steady burning yellow light, conspicuously visible at all distances up to 1000' under normal atmospheric conditions. The light, operated by battery, electric generator, commercial power or propane gas, shall be in operation at all times between sunset and sunrise during the period the highway is closed.

SIGNS: Where the road is closed to traffic by the erection of gates and barricades, a **ROAD CLOSED** sign (R-75) shall be mounted on the gate as shown. On three-lane pavement, the sign shall be mounted on the middle gate facing traffic.

Where traffic is maintained, a **ROAD CONSTRUCTION TRAFFIC MAINTAINED** sign (OC-4) shall be used on the right shoulder wing barricade on the approaches to major construction or maintenance jobs less than 2 miles in length. A **ROAD CONSTRUCTION NEXT MILES** sign (OC-6) shall be used on the right shoulder wing barricade on the approaches to any major construction or maintenance job of 2 miles or more in length. An **END CONSTRUCTION** sign (OC-8) shall be erected above the right hand wing barricade facing traffic leaving the construction section. The signs on the wing barricades shall be erected above the top rail of the wing barricade on braces, as detailed hereon.

PAINTING AND REFLECTORIZATION: All rails of the barricades and gates shall be reflectorized with orange and white reflectorized sheeting in 6" wide alternate stripes which slope downward toward the center line of the road at an angle of 45%. All three rails of the Road Closed barricade shall be striped on the side facing traffic. All three rails of the wing barricade and all gate rails shall be striped on both sides. All posts, braces, gate legs and any unstriped rails shall be painted white.

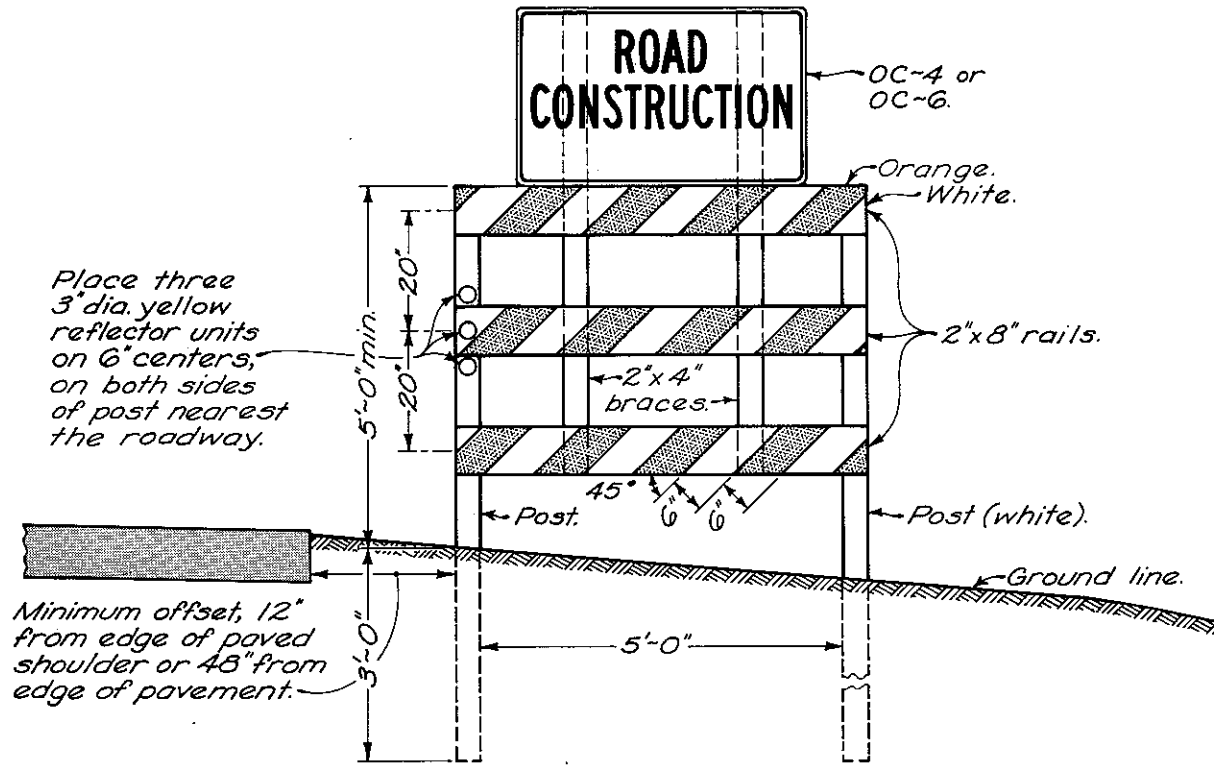
GATES: One gate shall be erected for each traffic lane. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 1/4" stock or larger with welded links.

A hinged gate may be used and shall be an approved 12' by 4' steel frame farm type, or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with 1"x8" lumber or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

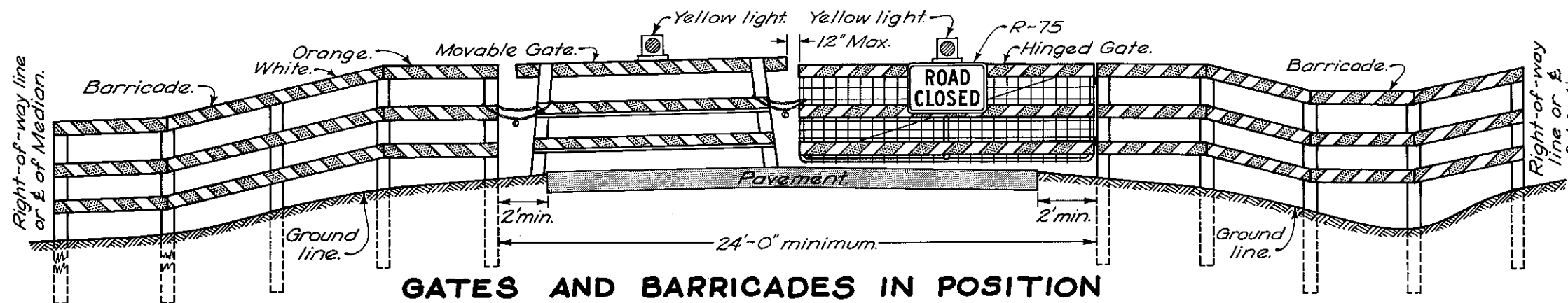
LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, surfaced on four sides standard, or other materials approved by the Engineer. All sizes are nominal.

POSTS shall be sound 4"x4" sawed or 4 1/2" round. Rails of the barricade shall be bolted to the posts with 5/8" bolts.

ROAD CONSTRUCTION



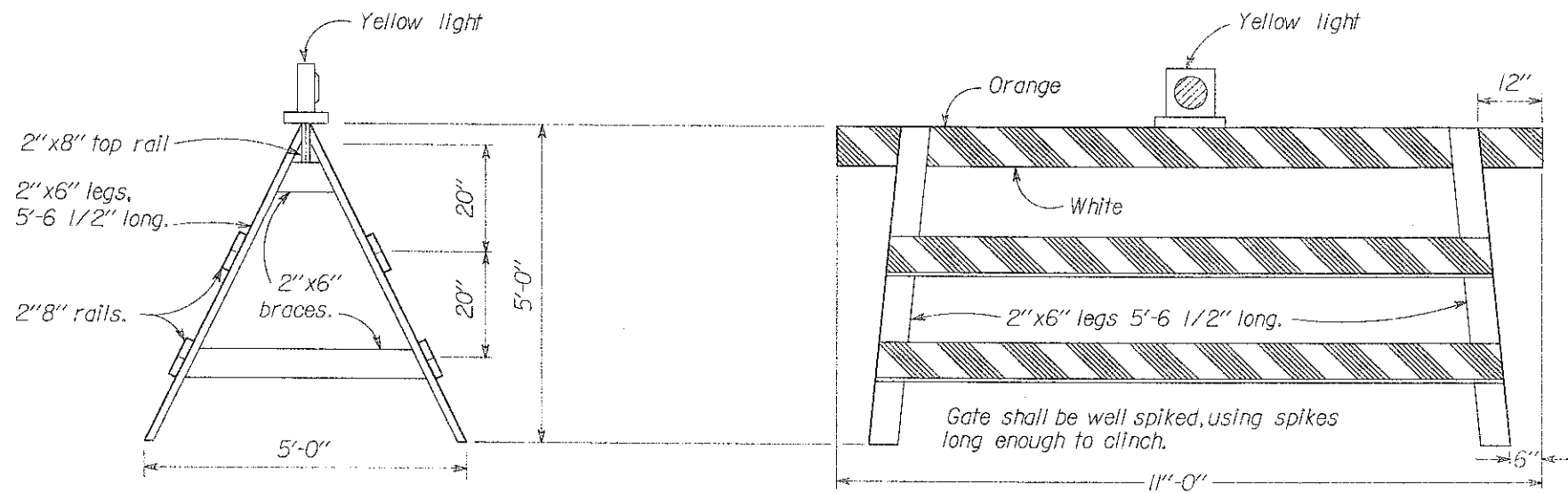
WING BARRICADE



GATES AND BARRICADES IN POSITION

BUREAU OF ROADWAY DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
BARRICADES AND GATES	
STANDARD CONSTRUCTION DRAWING MC-3	
APPROVED <i>[Signature]</i> ENGR., R. D.	
DATE	6-1-65 5-1-66 11-1-66 6-20-69 6-1-73

MOVABLE GATE



NOTES

BARRICADES shall be constructed according to details shown. Where traffic is maintained during construction, wing barricades may be used on the shoulders at the option of the Contractor at no additional cost to the State, unless otherwise required in the plans.

When the road is closed to traffic, barricades and gates shall be used to effectively close the entire roadway including the median of divided highways. In urban areas and at locations where it is impracticable to extend the barricade to the right-of-way line because of a sidewalk or other obstruction, the ends of the barricade shall be located as directed by the Engineer to effect the desired closing of the highway.

PAINTING AND REFLECTORIZATION: All rails of the barricades and gates shall be reflectorized with orange and white reflectorized sheeting in 6" wide alternate stripes which slope downward toward the center line of the road at an angle of 45°. All three rails of the Road closed barricade shall be striped on the side facing traffic. All three rails of the wing barricade and all gate rails shall be striped on both sides. All posts, braces, gate legs and any unstriped rails shall be painted white.

GATES: One gate shall be erected for each traffic lane. Gates shall be chained and padlocked to one another and to adjacent posts of the barricades. Chains shall be 1/4" stock or larger with welded links.

A hinged gate may be used and shall be an approved 12' by 4' steel frame farm type, or a type approved by the Engineer. The gate shall be hung on hinge screw hooks, or as otherwise approved. Striping similar to that used on the movable gate shall be accomplished with 1"x8" lumber or with metal strips fastened to the gate. The gate shall be supported at the center in an approved manner.

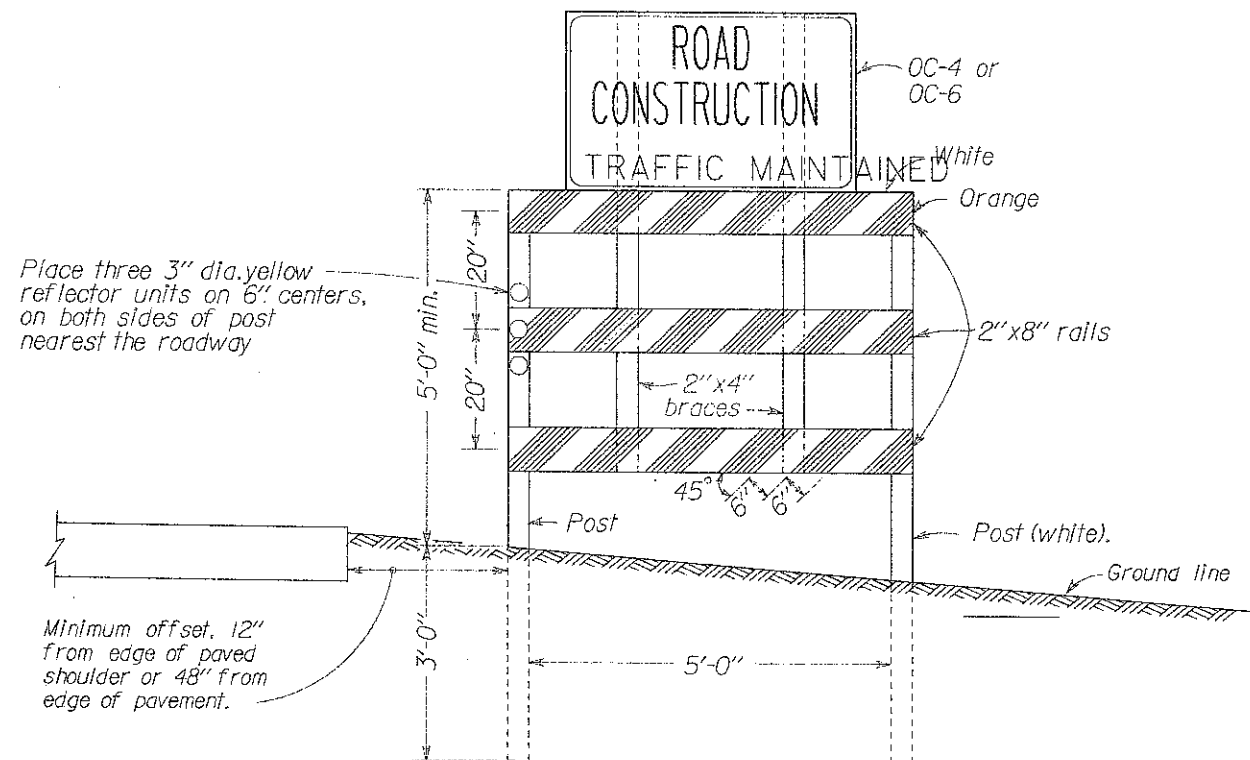
YELLOW LIGHT: Each gate shall be equipped with a steady burning yellow light, conspicuously visible at all distances up to 1000' under normal atmospheric conditions. The light, operated by battery, electric generator, commercial power or propane gas, shall be in operation at all times between sunset and sunrise during the period the highway is closed.

SIGNS: Where the road is closed to traffic by the erection of gates and barricades, a **ROAD CLOSED** sign (R-75) shall be mounted on the gate as shown. On three-lane pavement, the sign shall be mounted on the middle gate facing traffic.

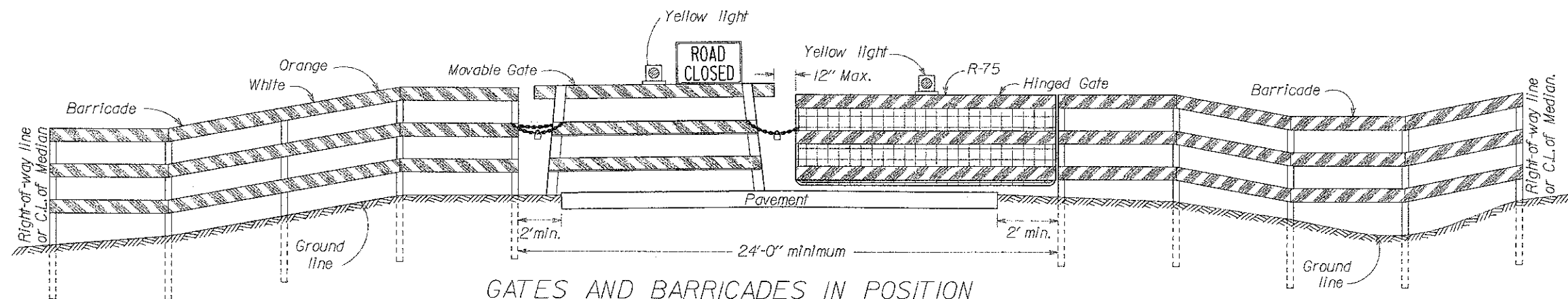
Where traffic is maintained, a **ROAD CONSTRUCTION TRAFFIC MAINTAINED** sign (OC-4) shall be used on the right shoulder wing barricade on the approaches to major construction or maintenance jobs less than 2 miles in length. A **ROAD CONSTRUCTION NEXT MILES** sign (OC-6) shall be used on the right shoulder wing barricade on the approaches to any major construction or maintenance job of 2 miles or more in length. An **END CONSTRUCTION** sign (OC-8) shall be erected above the right hand wing barricade facing traffic leaving the construction section. The signs on the wing barricades shall be erected above the top rail of the wing barricade on braces, as detailed hereon. If wing barricades are not used, the OC-4, OC-6 and OC-8 signs shall be mounted on supports in accordance with Part 7 of the Ohio Manual of Traffic Control for Construction and Maintenance Operations.

LUMBER used in the construction of the gates and barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, surfaced on four sides standard, or other materials approved by the Engineer. All sizes are nominal.

POSTS for barricades shall be sound 4"x4" sawed or 4 1/2" round. Rails of the barricade shall be bolted to the posts with 5/8" bolts.



WING BARRICADE



GATES AND BARRICADES IN POSITION

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
BARRICADES AND GATES	
STANDARD CONSTRUCTION DRAWING	MC-3
APPROVED	ENGR., L. & D.

DATE
6-1-65
5-1-66
11-1-69
6-20-69
6-1-73
3-1-83