

**DETAIL E** LANE CLOSURE BARRICADE DETAIL **APPROACH VIEW** 

SEE SDD 15C2 - SHEET "a" FOR LEGEND

### **GENERAL NOTES**

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2. R11 - 3. M4 - 9. R11 - 4. AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11 - 2 SHALL BE 48" X 30"

R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"

M4 - 9 SHALL BE 30" X 24"

M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)

M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)

MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)

D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

R1 - 1 SHALL BE 36" X 36"

- TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT **SPACING**
- THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- (3) FOR ROAD CLOSURE <u>WITHOUT</u> LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- (4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- (5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- (6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS. PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE
- "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

### **BARRICADES AND SIGNS** FOR

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

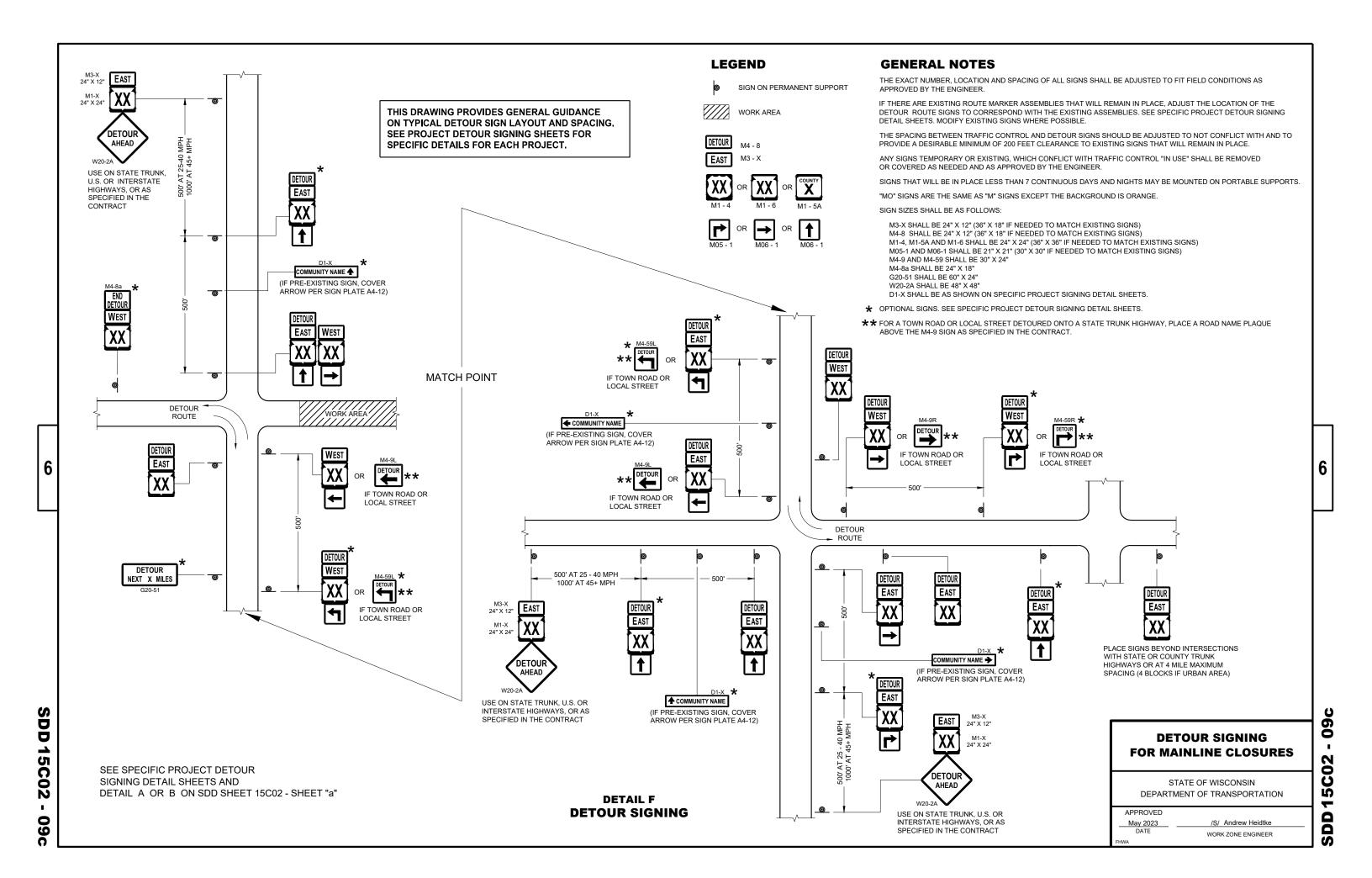
**APPROVED** May 2023 DATE WORK ZONE ENGINEER

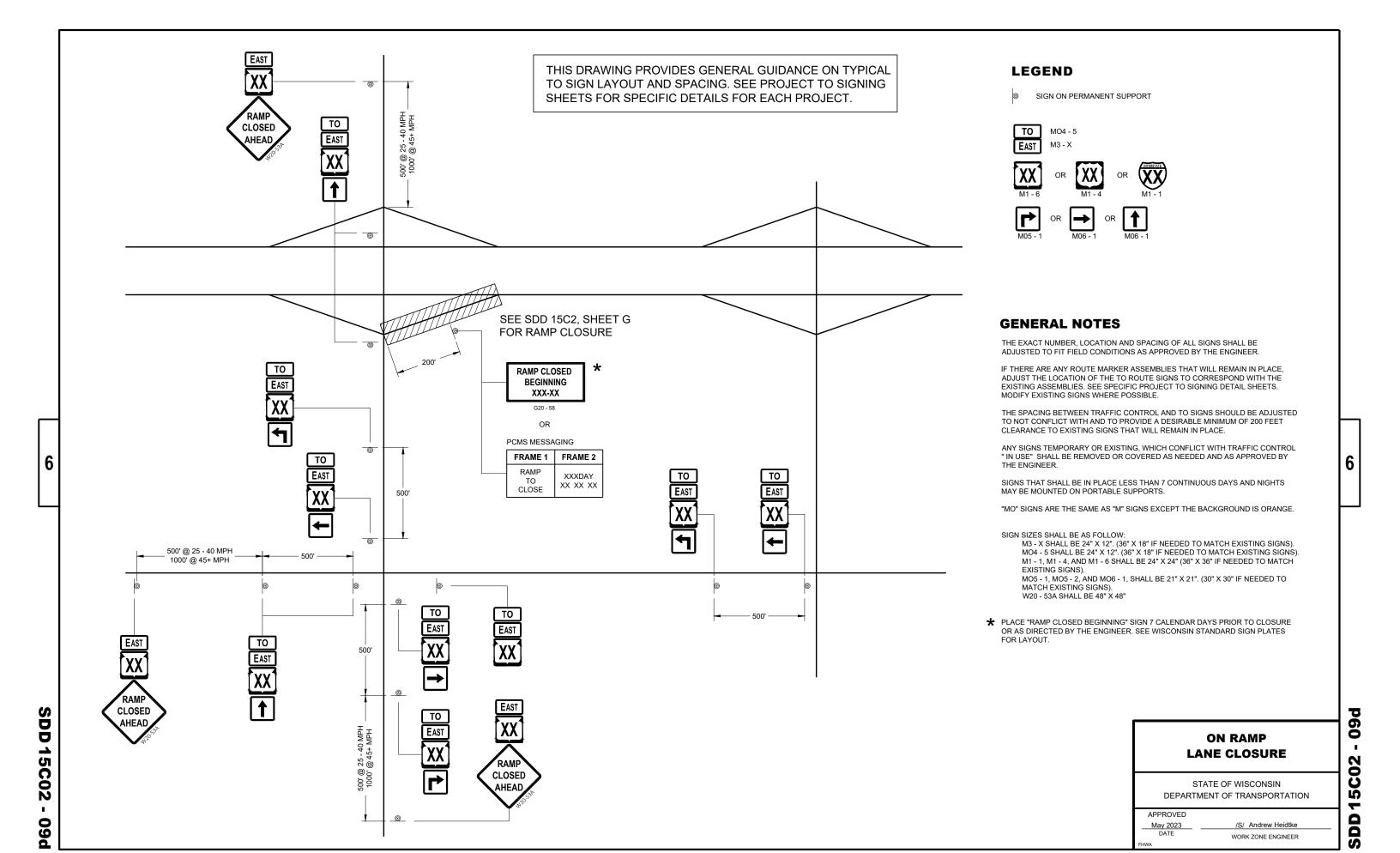
**VARIOUS CLOSURES** 

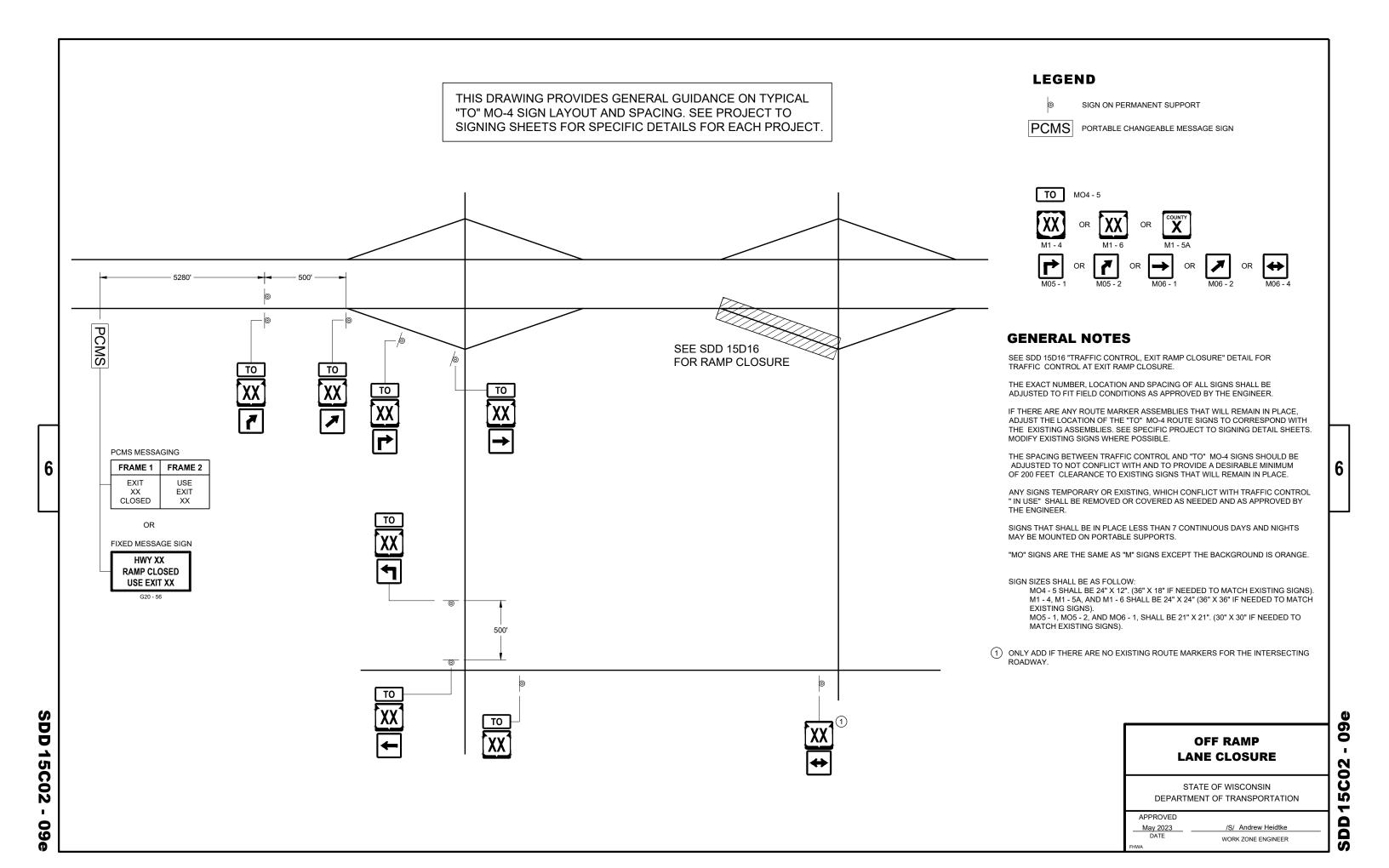
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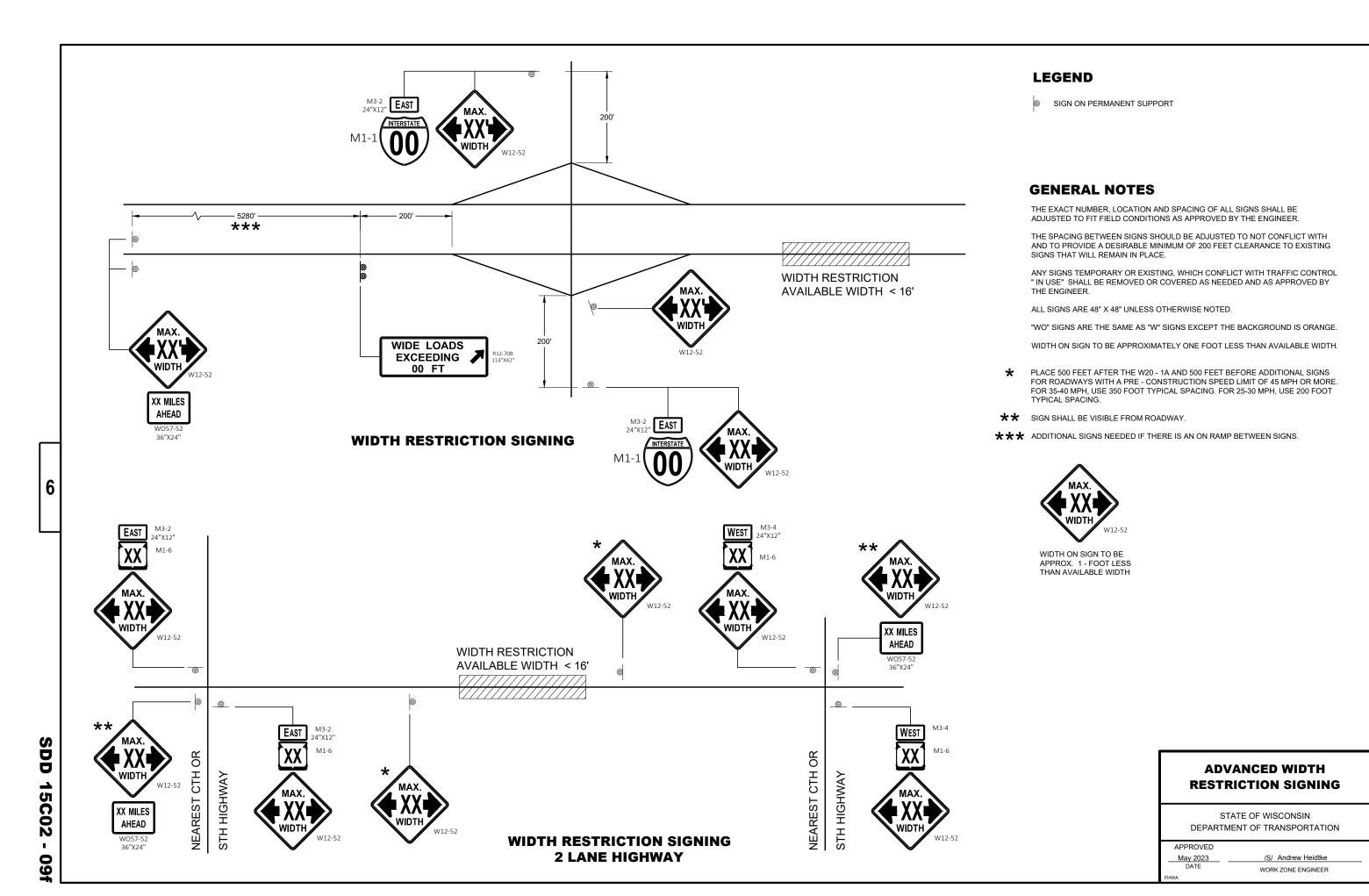
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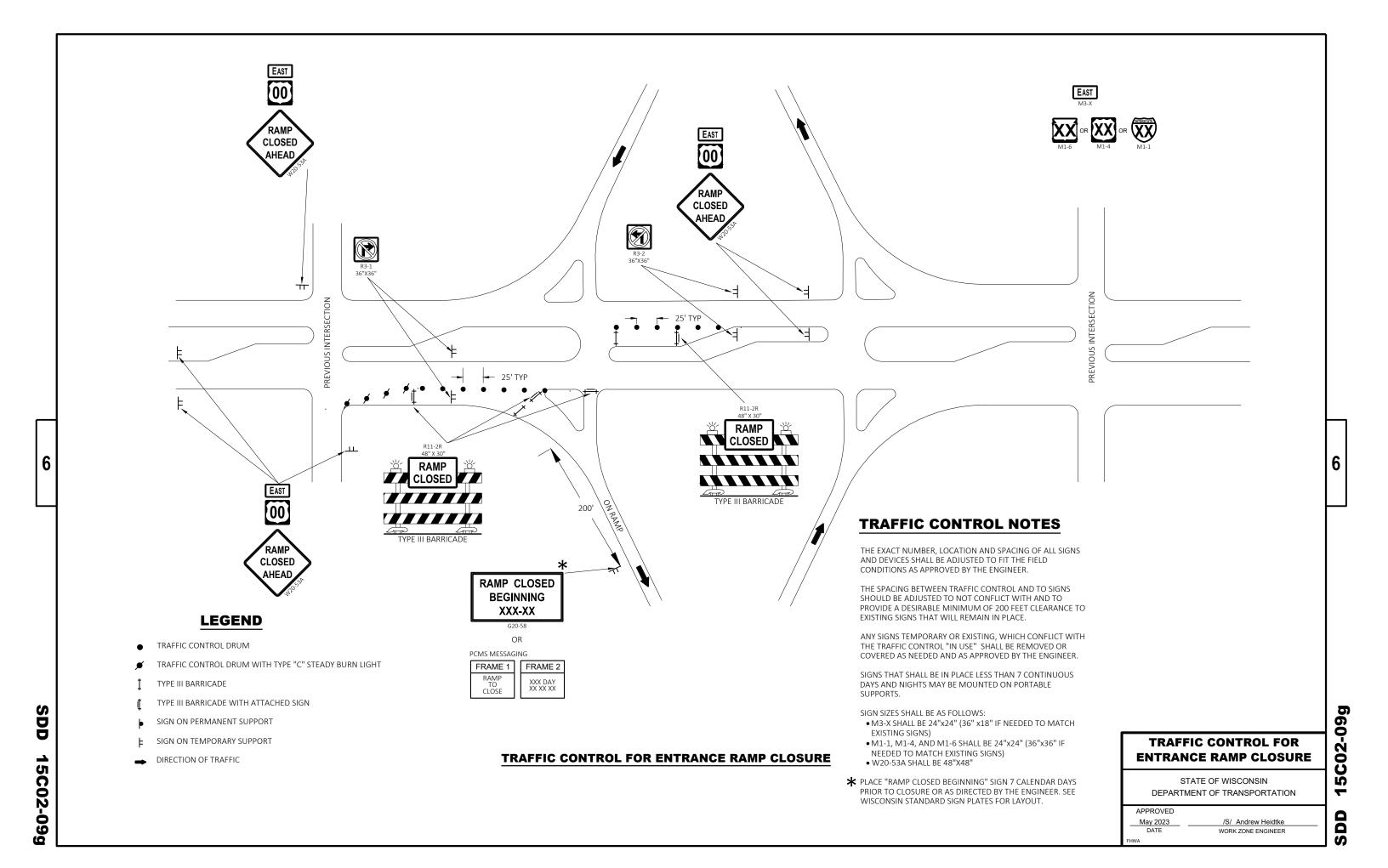
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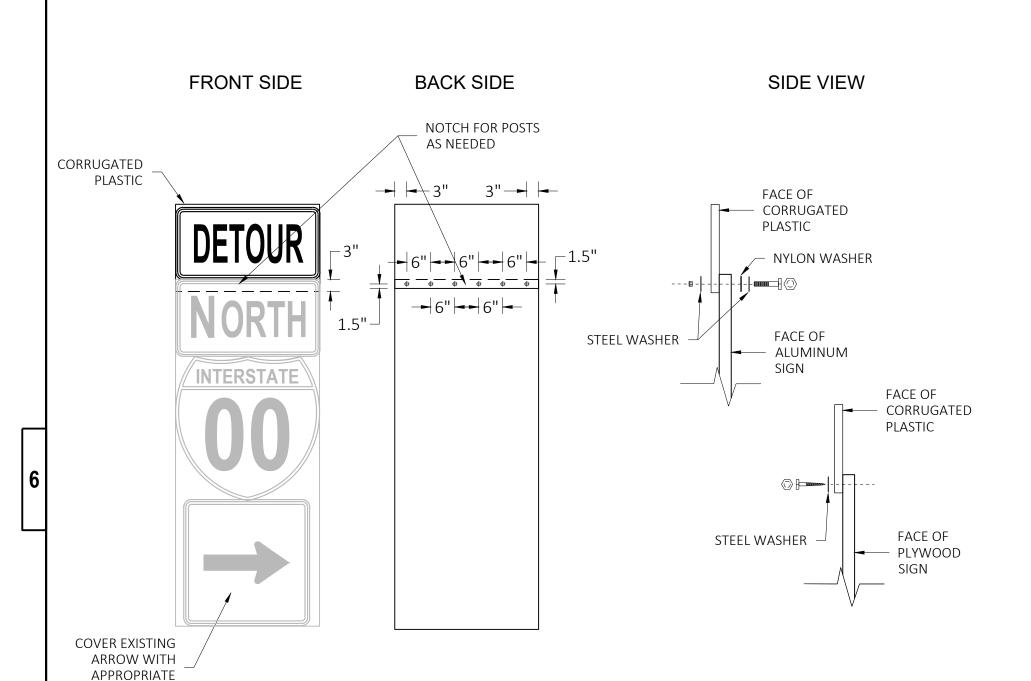








SDD 15C02-09h



### **GENERAL NOTES**

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3.
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

**PLYWOOD SIGNS:** 

LAG SCREWS - 5/16" x 1"

**ALUMINUM SIGNS:** 

MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS

**WASHERS:** 

1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL 1-1/4" O.D. x 3/8" I.D. x .080 NYLON

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

## MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023 /S/ Andrew Heidtke

DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

) 15C02-09h

**DETOUR ARROW** 

### Barricades and Signs for Mainline Closures

#### References:

Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) FDM 11-50-20

### Bid items associated with this drawing:

ITEM NUMBER	<u>DESCRIPTION</u>	<u>UNIT</u>
643.0420	Traffic Control Barricades Type III	DAY
643.0705	Traffic Control Warning Lights Type A	DAY
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF
	For D1-x and R10-61 Mod. "Access To" signs.	
643.1050	Traffic Control PCMS	DAY

### Standardized Special Provisions associated with this drawing:

108-057 Wisconsin Lane Closure System Advance Notification

#### Other SDDs associated with this drawing:

SDD 15C2	Barricades and Signs for Various Mainline Closures sheet "b" is required.
SDD 15C2	Barricades and Signs for Mainline Closures sheet "c" (if detour route signing is included in the contract)
SDD 15C3	Barricades and Signs for Sideroad Closures (if sideroads intersect the mainline within the closure)
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### SDD 15D30 Traffic Control, Sidewalk Closure (if sidewalk will be closed)

### **Design Notes:**

A traffic control overview sheet is desirable to indicate the following:

Whether to use Detail A, B, or C (and Detail D or E from SDD 15C2 sheet "b") at each end of the project.

Sideroads within the project and whether to use Detail 1, 2, 3, or 4 from SDD 15C3 at each sideroad.

Detour route if one is being designated, unless the route is shown on a detour route signing sheet.

On Details A & B, the following signing is to be installed by the contractor only if specified elsewhere in the contract. Consult with the Region Traffic Unit about the need to include these signs in the contract:

Detour Route signing. Regions (or other maintaining authority) may choose to install detour route signing with their own forces. If so, indicate it in the Special Provisions. If it is to be installed by the contractor, include separate sheets to show the detour route signing (include signs to be covered or modified using item 643.0910 or 643.0920) along and in advance of the detour, and on main intersecting roads. If the route being detoured is a local road, the M4-9 signs should be supplemented by a road name plaque (using Item 643.1000), especially if the local road is detoured onto a state-trunk highway. Include a special sign layout for the road name plaque or specify the plaque color and letter size (typically black on white or orange, 5" Series C letters) on the detour sheets.

Detour warning signs (W20-2). W20-2 signs are usually included in the contract. Some Regions or other maintaining authorities may choose to install them with their own forces. If additional warning of the detour is desired, a W20-2G "Detour 1/2 Mile" sign may be added to the series of advance warning signs. Where multiple routes run concurrently on the same road but not all of them are being detoured, W20-2 signs may be supplemented by a route marker if needed to clearly indicate the detoured highway.

Route markers to supplement W20-2 signs (as described above) or W20-3 signs. Regions may choose to furnish route markers for installation by the contractor. If so, indicate it in the plan or Special Provisions.

Community guide signs (D1-x). New or modified D1-x signs are desirable if motorists must take an alternate route to a community. If new signs are to be installed, include plan details showing the special sign layouts.

"Access To \_\_\_\_\_" signs (R10-61 Mod.). These signs are desirable if there is a community located beyond the beginning of the detour route but prior to the actual road closure point.

"Stop" and "Stop Ahead" signs. Consider using these signs as shown if the traffic volume on the detour route is expected to be greater than the local traffic volume that will continue using the normal mainline route, especially if the detour traffic makes a left turn at the intersection. Also consider the need for "3-Way" (R1-3) or R1-52-series supplementary signs if temporary stop signs are to be installed.

If W20-2, D1-x, R10-61 (Mod.), or Stop-control signs along or in advance of the detour are to be installed or modified by the contractor, indicate them on the traffic control overview or detour route signing sheet, Special Provisions, and/or Misc. Quantities.

### **Contact Person:**

### Barricades and Signs for Various Mainline Closures

### References:

Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) FDM 11-50-20

### Bid items associated with this drawing:

ITEM NUMBER	DESCRIPTION	<u>UNIT</u>
643.0420	Traffic Control Barricades Type III	DAY
643.0705	Traffic Control Warning Lights Type A	DAY
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	

### Standardized Special Provisions associated with this drawing:

108-057 Wisconsin Lane Closure System Advance Notification

### Other SDDs associated with this drawing:

SDD 15C2	Barricades and Signs for Mainline Closures sheet "a" is required.
SDD 15C2	Barricades and Signs for Mainline Closures sheet "c" (if detour route signing is included in the contract)
SDD 15C3	Barricades and Signs for Sideroad Closures (if sideroads intersect the mainline within the closure)

### **Design Notes:**

A traffic control overview sheet is desirable to indicate the following:

Whether to use Detail D or E (and Detail A, B, or C from SDD 15C2 sheet "a") at each end of the project. Sideroads within the project and whether to use Detail 1, 2, 3, or 4 from SDD 15C3 at each sideroad.

### **Contact Person:**

### Detour Signing for Mainline Closures

#### References:

Part 6 of the Manual on Uniform Traffic Control Devices (MUTCD) FDM 11-50-20

### Bid items associated with this drawing:

<u>ITEM</u> NUMBER	DESCRIPTION	<u>UNIT</u>
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF
	(For D1-x signs)	

### Standardized Special Provisions associated with this drawing:

108-057 Wisconsin Lane Closure System Advance Notification

### Other SDDs associated with this drawing:

SDD 15C2 Barricades and Signs for Mainline Closures sheets "a" and "b" are required.

### **Design Notes:**

Project-specific detour route signing sheets are required in the plans. This SDD does not substitute for project-specific sheets. Use this SDD for typical sign spacing, codes, and sizes, and as guidance in developing project-specific detour sheets. In addition to detour route signing, the project-specific sheets should show all needed D1-x community guide signs and any existing signs to be covered or modified (use item 643.0910 or 643.0920).

If the detour will be in place longer than two weeks or if otherwise recommended by the Region Traffic Unit, consider the need for upgraded stop signs, W14-3 (48" x 36") No Passing Zone pennant signs and other warning or regulatory signs along the detour route. If new or upgraded signs are included in the contract and will remain in place after the detour is removed, use Item 637.0202, Signs Reflective Type II (SF) to pay for these signs. Items from Sections 634 and 638 may also be needed for sign posts and removals.

Some of the detour and community guide signs are shown on the SDD to be optional. Use the following guidance or consult with the Region Traffic Unit about the need to include these signs in the contract:

Advance route turn assemblies and community guide signs (D1-x). On the detour route itself, advance route turn assemblies may be omitted on approaches to a stop sign if there is no existing advance route turn assembly already in place. On sideroads approaching intersections with the detour route, advance route turn assemblies may be omitted if the sideroad is a town road or similar low-volume roadway. If there are existing advance route turn assemblies or community guide signs, modify them as appropriate for the detour.

Detour warning sign (W20-2) assemblies with highway route marker. Use on the sideroad approaching the intersection with the detour route if the sideroad approach is a state-trunk, US, or Interstate highway or other high-volume roadway.

Detour Next X Miles (G20-51) sign. Consider if the detour adds more than 5 miles of extra travel distance compared to the distance along the normal mainline route.

See Design Notes for SDD 15C2 sheet "a" for more information on use of detour signs, route markers, and community guide signs.

On route marker assemblies that are not located on the detour route, the M4-8 "Detour" plaque may be substituted by a M4-5 "To" plaque.

### **Contact Person:**

### **Standard Detail Drawing 15C2** (sheet d)

May 2023

### Traffic Control, Guidance Signing for On-Ramp Closures

### References:

FDM 11-50-5.12 FDM 11-50-20 TEOpS 6-3-4.5

Manual on Uniform Traffic Control Devices (MUTCD)

### Bid items associated with this drawing:

<u>ITEM</u>	<u>NUMBER</u>	DESCRIPTION	<u>UNIT</u>
643.0	900	Traffic Control Signs	DAY
643.0	910	Traffic Control Covering Signs Type I	EACH
643.0	920	Traffic Control Covering Signs Type II	EACH
643.1	000	Traffic Control Signs Fixed Message	SF
643.1	050	Traffic Control PCMS	DAY

### Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE NONE

### Other SDDs associated with this drawing:

SDD 15C2 Barricades and Signs for Mainline Closures sheets "a" and "b" are required.

### **Design Notes:**

Use this drawing to direct traffic when access to a route is prevented by a ramp closure.

#### **Contact Person:**

### **Standard Detail Drawing 15C2** (sheet e)

May 2023

### Traffic Control, Guidance Signing for Off-Ramp Closures

### References:

FDM 11-50-5.12 FDM 11-50-20 TEOpS 6-3-4.5

Manual on Uniform Traffic Control Devices (MUTCD)

### Bid items associated with this drawing:

<u>ITEM NUMBER</u>	DESCRIPTION	<u>UNIT</u>
643.0900	Traffic Control Signs	DAY
643.0910	Traffic Control Covering Signs Type I	EACH
643.0920	Traffic Control Covering Signs Type II	EACH
643.1000	Traffic Control Signs Fixed Message	SF

### Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE

None

### Other SDDs associated with this drawing:

SDD 15C2 Barricades and Signs for Mainline Closures sheets "a" and "b" are required.

SDD 15D16 Traffic Control, Exit Ramp Closure

### **Design Notes:**

Use this drawing to direct traffic when access to a route is prevented by a ramp closure.

### **Contact Person:**

### Traffic Control, Advanced Width Restriction Signing

### References:

FDM 11-50-5.12 FDM 11-50-20

TEOpS 6-3-4.5

Manual on Uniform Traffic Control Devices (MUTCD)

### Bid items associated with this drawing:

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
643.0900	Traffic Control Signs	DAY
643.1000	Traffic Control Signs Fixed Message	SF

### Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE

None

### Other SDDs associated with this drawing:

SDD 15D3	Traffic Control, Lane Closure, Speeds Greater than 40 M.P.H. with Barrier
SDD 15D12	Traffic Control, Lane Closure
SDD 15D14	Traffic Control, Two Lane Closure on Freeway or Expressway, Short-Term
SDD 15D20	Traffic Control, Single Lane Closure, Non-Freeway/Expressway
SDD 15D22	Traffic Control, Two Lane Closure, Non-Freeway/Expressway
SDD 15D27	Traffic Control, Shoulder Closure on Divided Roadway, Speeds Greater than 40 M.P.H.
SDD 15D28	Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway
SDD 15D31	Traffic Control, Temporary Bypass Roadway
SDD 15D32	Traffic Control, One Lane Road Stop Condition
SDD 15D33	Traffic Control, One Lane Road with Temporary Signals
SDD 15D37	Traffic Control, 2-Lane Roundabout

### **Design Notes:**

Use this drawing when you have a lane restriction as shown in TEOpS 6-3-4.5

### **Contact Person:**

# Version 9 Standard Detail Drawing 15c2 (sheet g) May 2023 Traffic Control, Entrance Ramp Closure

### References:

Part VI of the Manual on Uniform Traffic Control Devices (MUTCD) FDM 11-50-20

### Bid items associated with this drawing:

<u>ITEM NUMBER</u>	DESCRIPTION	<u>UNIT</u>
643.0420	Traffic Control Barricades Type III	DAY
643.0705	Traffic Control Warning Lights Type A	DAY
643.0900	Traffic Control Signs	
643.1000	Traffic Control Signs Fixed Message	SF
643.1050	Traffic Control Covering PCMS	DAY

### Standardized Special Provisions associated with this drawing:

STSP NUMBER TITLE

None

### Other SDDs associated with this drawing:

SDD 15C2 On Ramp Closure

### **Design Notes:**

If work is present on the ramps, add W20-1A signs in advance of W20-53A signs.

### **Contact Person:**

Version 9

### Standard Detail Drawing 15c2 (sheet h)

May 2023

### Modified Route Assembly for Detour Signing

### References:

Part VI of the Manual on Uniform Traffic Control Devices (MUTCD) FDM 11-50-20

### Bid items associated with this drawing:

ITEM NUMBERDESCRIPTIONUNIT643.0900Traffic Control SignsDAY

### Standardized Special Provisions associated with this drawing:

STSP NUMBER

**TITLE** 

None

### Other SDDs associated with this drawing:

SDD 15C2

Sheets a-e

### **Design Notes:**

None

### **Contact Person:**