

Traffic Control

TC

Traffic Control

NO.	DATE	TITLE
Two-Lane and Multi-Lane Roadways		
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-61	04-21-20	Two-Lane, Two-way Operation
TC-62	10-20-20	Permanent Two-Lane to Four-Lane Divided Transition
TC-63	10-16-18	Lane Closure at Two-Lane to Four-Lane Transition.
TC-64	10-16-18	Lane Closure at Two-Lane to Four-Lane Transition with Flagger
TC-81	10-15-19	Restricted Width Signing (Less Than 14.5 Feet)
Two-Lane Roadways		
TC-202	04-21-15	Work Within 15 ft of Traveled Way
TC-203	10-15-19	Aerial Seeding Operations
TC-211	10-15-19	Lane Closure on Low Volume Roadway
TC-212	04-21-20	Spot Location Lane Closure with Flaggers
TC-213	10-15-19	Lane Closure with Flaggers
TC-214	04-21-20	Lane Closure with Flaggers for use with Pilot Car
TC-215	10-15-19	Lane Closure with Signals (Up to Three Days)
TC-216	10-18-16	Lane Closure with Signals
TC-217	10-18-16	Lane Closure with Signals and TBR
TC-218	04-21-20	Lane Closure with Pilot Car and Flagger Operated Signals
TC-228	10-16-18	Lane Closure Involving TWLTL
TC-231	10-15-19	Slow Moving Vehicle Operating in the Traffic Lane
TC-232	10-21-14	Shoulder Rumble Strip Operations
TC-233	10-17-17	Pavement Marking Operations Two-Lane
TC-234	10-17-17	Strip Sealing Operations
TC-235	10-15-19	Edge Rut Repair
TC-251	10-15-19	Temporary Road Closure
TC-252	04-21-20	Routes Closed to Traffic

Traffic Control

NO.	DATE	TITLE
TC-253	10-18-16	Paved On-Site Detour
TC-271	10-18-16	Signalized Equipment Crossing
TC-272	10-18-16	Unsignalized Equipment Crossing
TC-273	10-15-19	Construction Site Entrance
TC-282	10-15-19	Uneven Lanes
TC-283	10-15-19	Surveying Operations
TC-284	10-15-19	No Centerline Markings on Non-Primary Roadways
Multi-Lane Roadways		
TC-402	04-21-15	Work Within 15 ft of Traveled Way
TC-403	10-15-19	Aerial Seeding Operations
TC-415	04-21-20	Short Term Lane Closure with TMA
TC-416	10-15-19	Partial Lane Closure on Ramps
TC-417	04-21-20	Ramp Closure
TC-418	04-21-20	Lane Closure on Divided Highway
TC-419	10-16-18	Lane Closure on Undivided Highway
TC-420	10-16-18	Lane Closure at Ramps
TC-421	04-21-20	Lane Closure with TBR
TC-422	04-21-20	Closure of Two Adjacent Lanes on Divided Highway
TC-423	10-20-20	Closure of Two Adjacent Lanes on Undivided Highway
TC-429	10-16-18	Closure of Continuous Two-Way Left Turn Lane and Adjacent Lane
TC-431	10-17-17	Slow Moving Vehicle Operating in the Traffic Lane
TC-432	10-17-17	Shoulder Rumble Strip Operations
TC-433	10-17-17	Pavement Marking Operations
TC-451	04-21-15	Temporary Road Closure on Divided Highway
TC-454	10-17-17	Temporary Detour Using Ramps on Divided Highway
TC-482	10-15-19	Uneven Lanes

Traffic Control

SECTION
TC

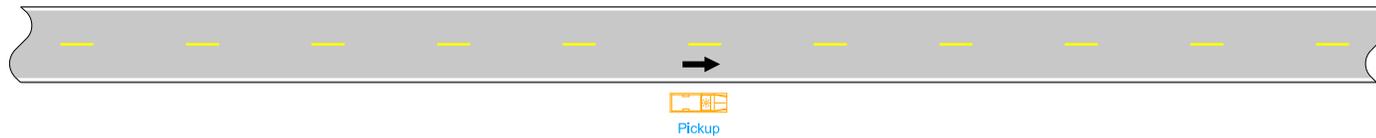
NO.	DATE	TITLE
TC-601	10-15-19	Pedestrian Detour
TC-602	10-15-19	Sidewalk Diversion

Do not allow work to interfere with the flow of traffic.

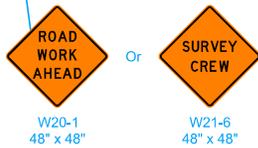
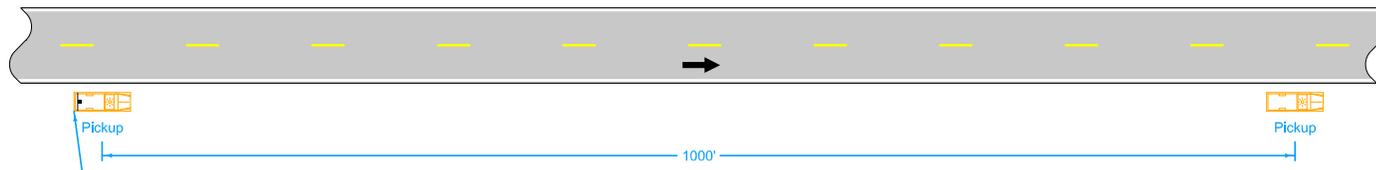
When parked, locate vehicles as far from the open traffic lane as possible. Entrances and driveways should be used whenever appropriate.

Equip all vehicles with an amber revolving light or amber strobe light.

① For work lasting longer than one hour, refer to [TC-202](#) or [TC-402](#).



VEHICLE STOPPED ON SHOULDER FOR LESS THAN ONE HOUR ①



LEGEND	
	Traffic Sign
	Direction of Traffic

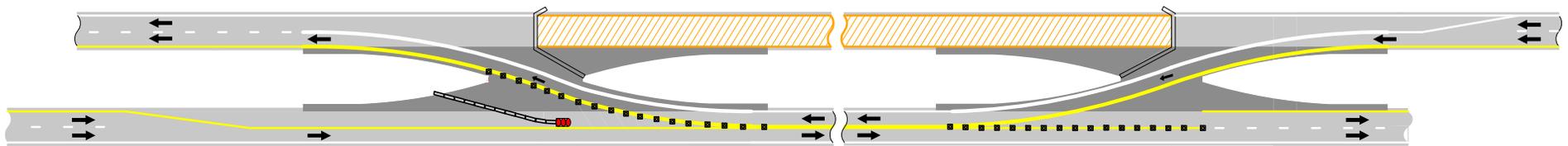
Possible Contract Item:
Traffic Control

	REVISION	
	3	10-15-19
STANDARD ROAD PLAN	TC-1	
	SHEET 1 of 1	
REVISIONS: New logo.		

APPROVED BY DESIGN METHODS ENGINEER

Handwritten Signature

**WORK NOT AFFECTING TRAFFIC
(TWO-LANE OR MULTI-LANE)**



See Sheets 2 and 4 for Details

See Sheets 3 and 4 for Details

OVERVIEW OF CROSSOVER

Place Two-Way Traffic symbol and DO NOT PASS signs alternately on both sides of the roadway at a maximum of one-half mile intervals for both directions of travel. Always have signs in sight of motorists.

When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signing, place RIGHT/LEFT LANE CLOSED 4 MILES and RIGHT/LEFT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, respectively, as appropriate.

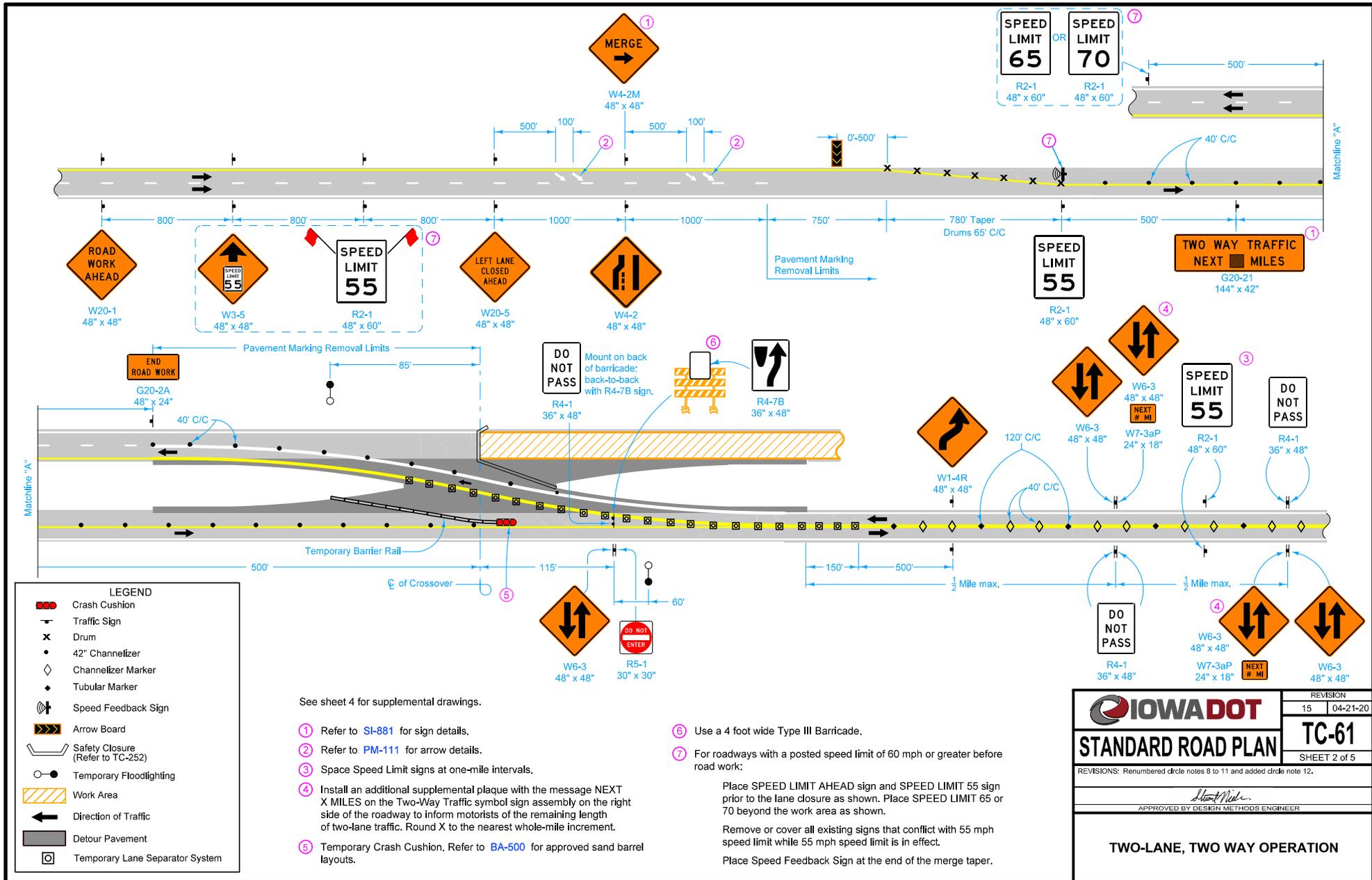
Possible Contract Items:

- | | |
|-----------------------------|---------------------------------|
| Painted Symbols and Legends | Temporary Barrier Rail |
| Pavement Marking Items | Temporary Crash Cushions |
| Pavement Marking Removed | Temporary Floodlighting |
| Safety Closures | Temporary Lane Separator System |
| | Traffic Control |

Possible Tabulations:

- 108-13A, 108-22, 108-27, 108-29, 108-30, 108-33, 108-35

	REVISION
	15 04-21-20
STANDARD ROAD PLAN	TC-61
SHEET 1 of 5	
<small>REVISIONS: Renumbered circle notes 8 to 11 and added circle note 12.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
TWO-LANE, TWO WAY OPERATION	



LEGEND

- Crash Cushion
- Traffic Sign
- Drum
- 42" Channelizer
- Channelizer Marker
- Tubular Marker
- Speed Feedback Sign
- Arrow Board
- Safety Closure (Refer to TC-252)
- Temporary Floodlighting
- Work Area
- Direction of Traffic
- Detour Pavement
- Temporary Lane Separator System

See sheet 4 for supplemental drawings.

- ① Refer to **SI-881** for sign details.
- ② Refer to **PM-111** for arrow details.
- ③ Space Speed Limit signs at one-mile intervals.
- ④ Install an additional supplemental plaque with the message NEXT X MILES on the Two-Way Traffic symbol sign assembly on the right side of the roadway to inform motorists of the remaining length of two-lane traffic. Round X to the nearest whole-mile increment.
- ⑤ Temporary Crash Cushion. Refer to **BA-500** for approved sand barrel layouts.

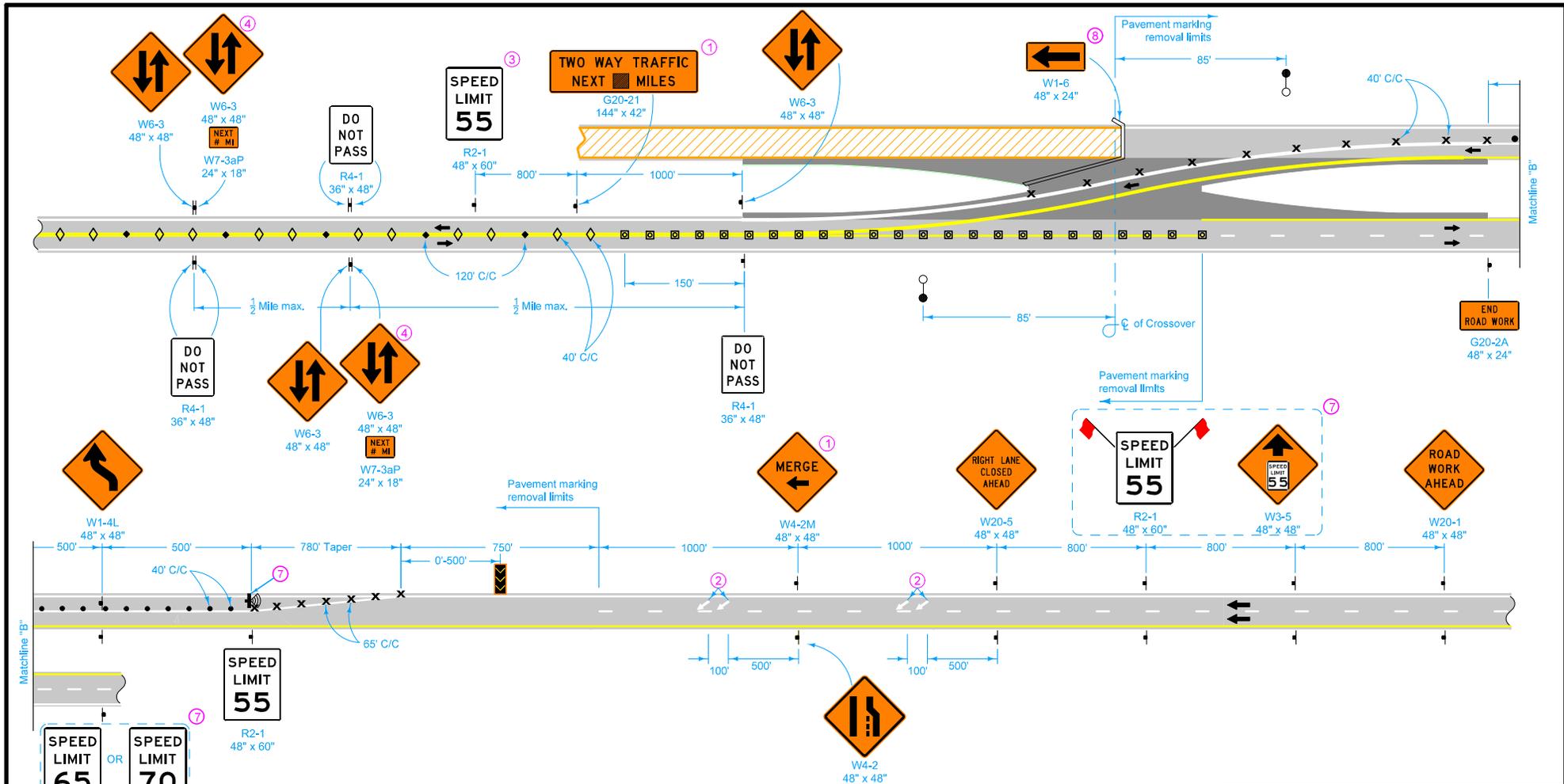
- ⑥ Use a 4 foot wide Type III Barricade.
- ⑦ For roadways with a posted speed limit of 60 mph or greater before road work:

Place **SPEED LIMIT AHEAD** sign and **SPEED LIMIT 55** sign prior to the lane closure as shown. Place **SPEED LIMIT 65** or **70** beyond the work area as shown.

Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect.

Place Speed Feedback Sign at the end of the merge taper.

	REVISION 15 04-21-20
	SHEET 2 of 5
STANDARD ROAD PLAN	TC-61
REVISIONS: Renumbered circle notes 8 to 11 and added circle note 12.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
TWO-LANE, TWO WAY OPERATION	



Matchline "B"

Matchline "A"

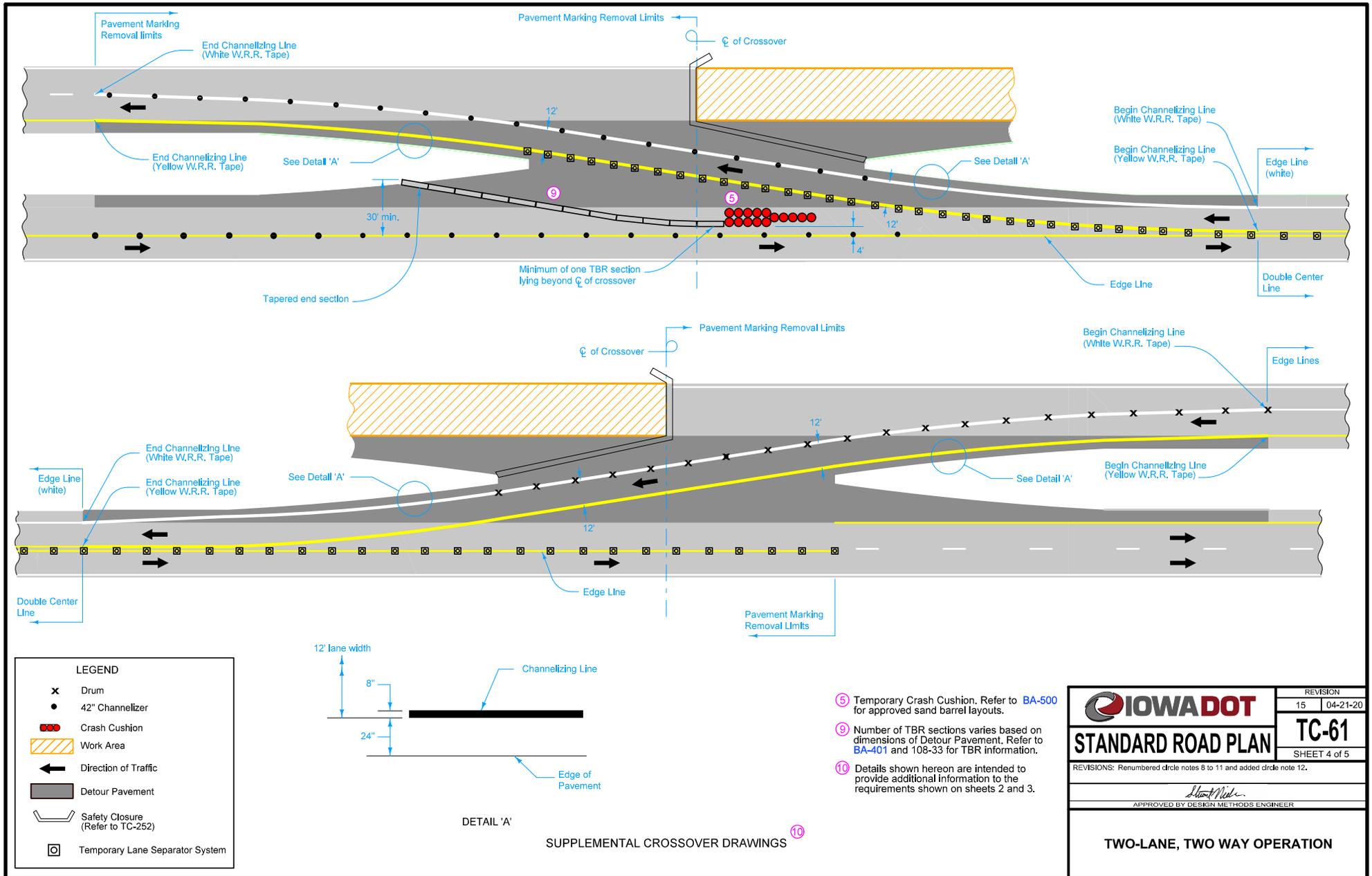
LEGEND

	Traffic Sign		Arrow Board
	Drum		Safety Closure (Refer to TC-252)
	42" Channelizer		Temporary Floodlighting
	Channelizer Marker		Work Area
	Tubular Marker		Direction of Traffic
	Temporary Lane Separator System		Detour Pavement
	Speed Feedback Sign		

See sheet 4 for supplemental drawings.

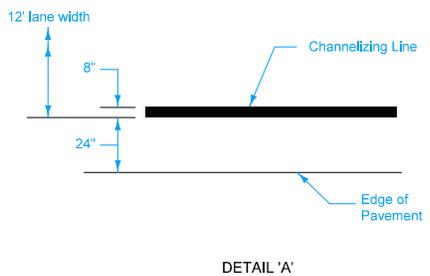
- ① Refer to **SI-881** for sign details.
- ② Refer to **PM-111** for arrow details.
- ③ Space Speed Limit signs at one-mile intervals.
- ④ Install an additional supplemental plaque with the message **NEXT X MILES** on the Two-Way Traffic symbol sign assembly on the right side of the roadway to inform motorists of the remaining length of two-lane traffic. Round X to the nearest whole-mile increment.
- ⑤ Place **SPEED LIMIT AHEAD** sign and **SPEED LIMIT 55** sign prior to the lane closure as shown. Place **SPEED LIMIT 65** or **70** beyond the work area as shown.
- ⑥ Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect. Place Speed Feedback Sign at the end of the merge taper.
- ⑦ For roadways with a posted speed limit of 60 mph or greater before road work:
- ⑧ Add below R11-2 already included in Safety Closure.

 STANDARD ROAD PLAN	REVISION 15 04-21-20
	TC-61
	SHEET 3 of 5
REVISIONS: Renumbered circle notes 8 to 11 and added circle note 12.	
 APPROVED BY DESIGN METHODS ENGINEER	
TWO-LANE, TWO WAY OPERATION	



LEGEND

- × Drum
- 42" Channelizer
- Crash Cushion
- ▨ Work Area
- ← Direction of Traffic
- ▬ Detour Pavement
- ⌒ Safety Closure (Refer to TC-252)
- Temporary Lane Separator System

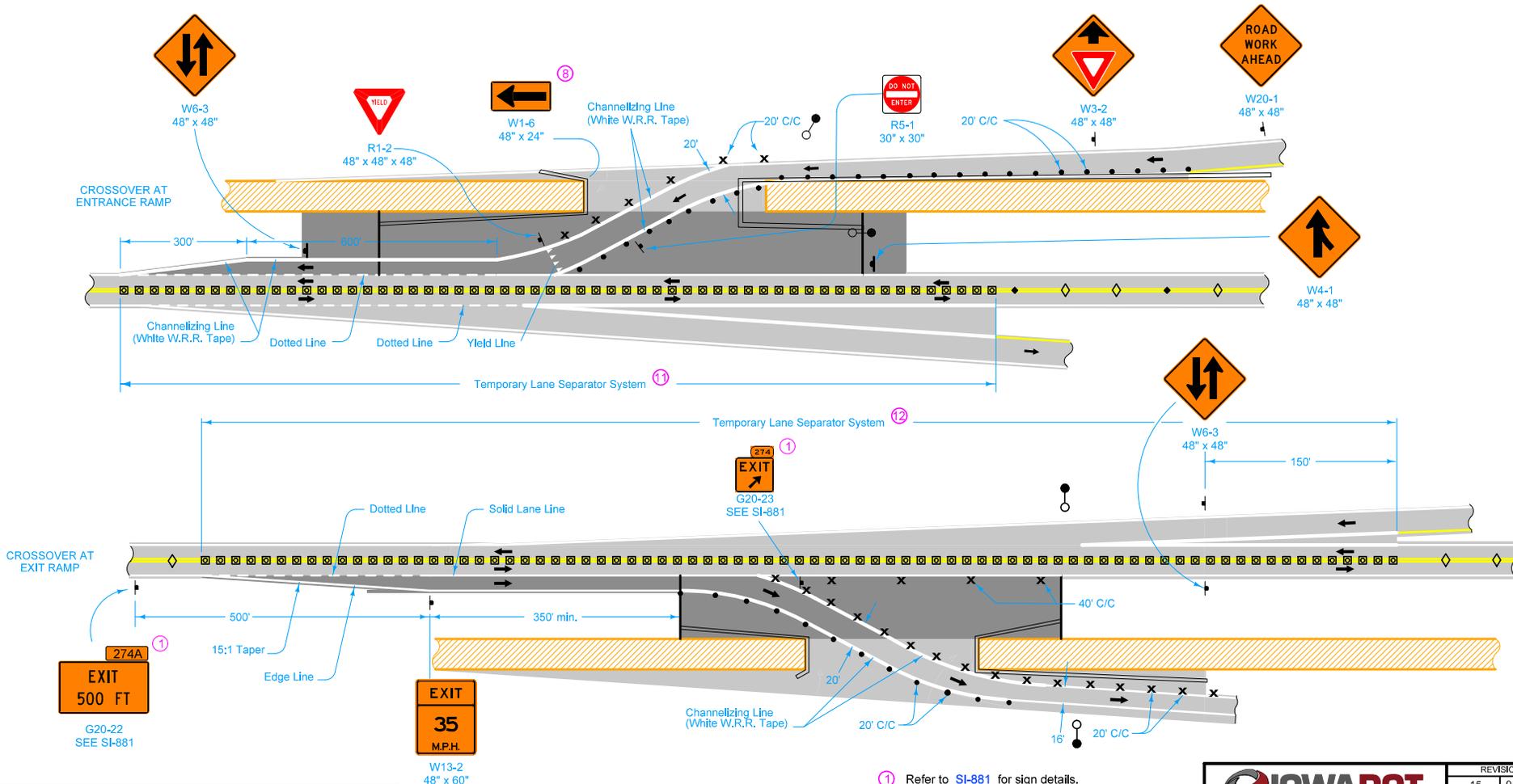


SUPPLEMENTAL CROSSOVER DRAWINGS ¹⁰

- ⑤ Temporary Crash Cushion. Refer to BA-500 for approved sand barrel layouts.
- ⑨ Number of TBR sections varies based on dimensions of Detour Pavement. Refer to BA-401 and 108-33 for TBR information.
- ⑩ Details shown hereon are intended to provide additional information to the requirements shown on sheets 2 and 3.

 STANDARD ROAD PLAN	REVISION 15 04-21-20
	TC-61
SHEET 4 of 5	
REVISIONS: Renumbered circle notes 8 to 11 and added circle note 12.	
 APPROVED BY DESIGN METHODS ENGINEER	
TWO-LANE, TWO WAY OPERATION	

RAMP LOCATIONS

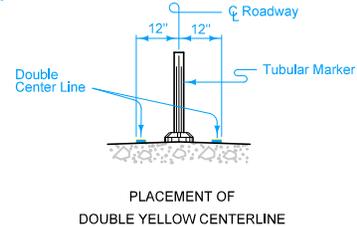


274A
EXIT
500 FT
G20-22
SEE SI-881

EXIT
35
M.P.H.
W13-2
48" x 60"

274
EXIT
G20-23
SEE SI-881

LEGEND	
↑	Traffic Sign
•	42" Channelizer
x	Drum
◇	Channelizer Marker
◆	Tubular Marker
○●	Temporary Floodlighting
⊠	Temporary Lane Separator System
▨	Work Area
■	Detour Pavement
←	Direction of Traffic
⌒	Safety Closure (Refer to TC-252)



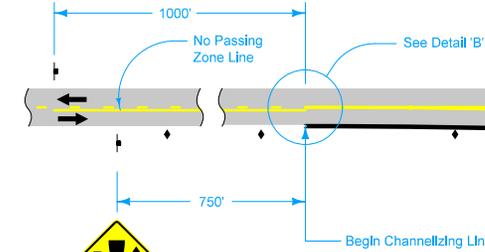
- ① Refer to SI-881 for sign details.
- ⑧ Add below R11-2 already included in Safety Closure.
- ⑪ Place TLSS from start of ramp gore to end of temporary ramp crossover.
- ⑫ Place TLSS from start of full width decel lane to end of ramp gore.

 STANDARD ROAD PLAN	REVISION 15 04-21-20
	TC-61
	SHEET 5 of 5
REVISIONS: Renumbered circle notes 8 to 11 and added circle note 12.	
 APPROVED BY DESIGN METHODS ENGINEER	
TWO-LANE, TWO WAY OPERATION	

CROSS TO THE RIGHT



W14-3
48" X 64" X 64"



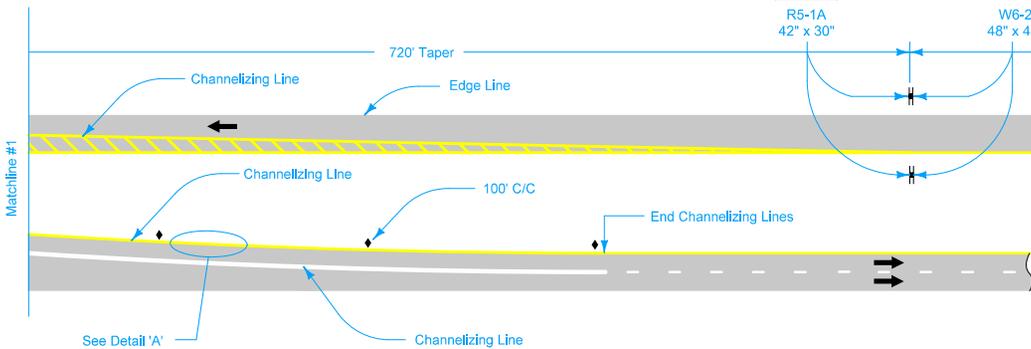
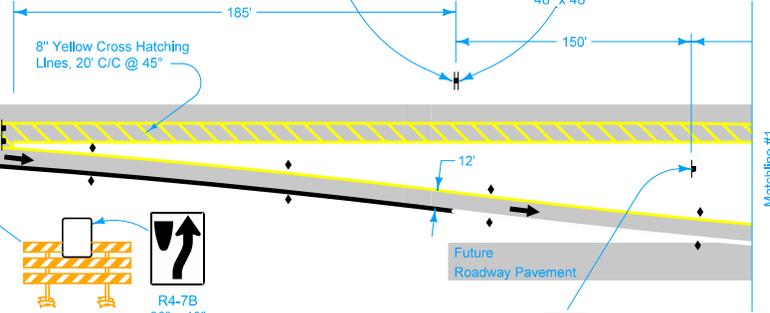
W6-1
48" x 48"



R6-1
30" x 30"



W6-3
48" x 48"



R5-1A
42" x 30"



W6-2
48" x 48"



W4-2
48" x 48"



R5-1
30" x 30"

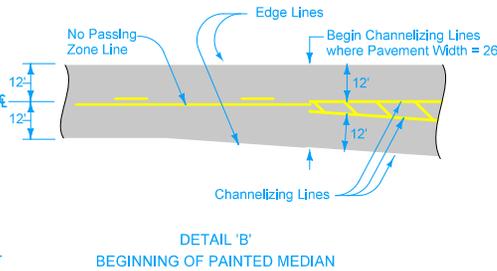
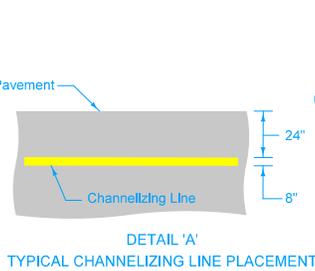


W9-2
48" x 48"

Possible Contract Items:
Pavement Marking Items
Permanent Road Closure
Delineators

Possible Tabulations: 102-4, 108-22

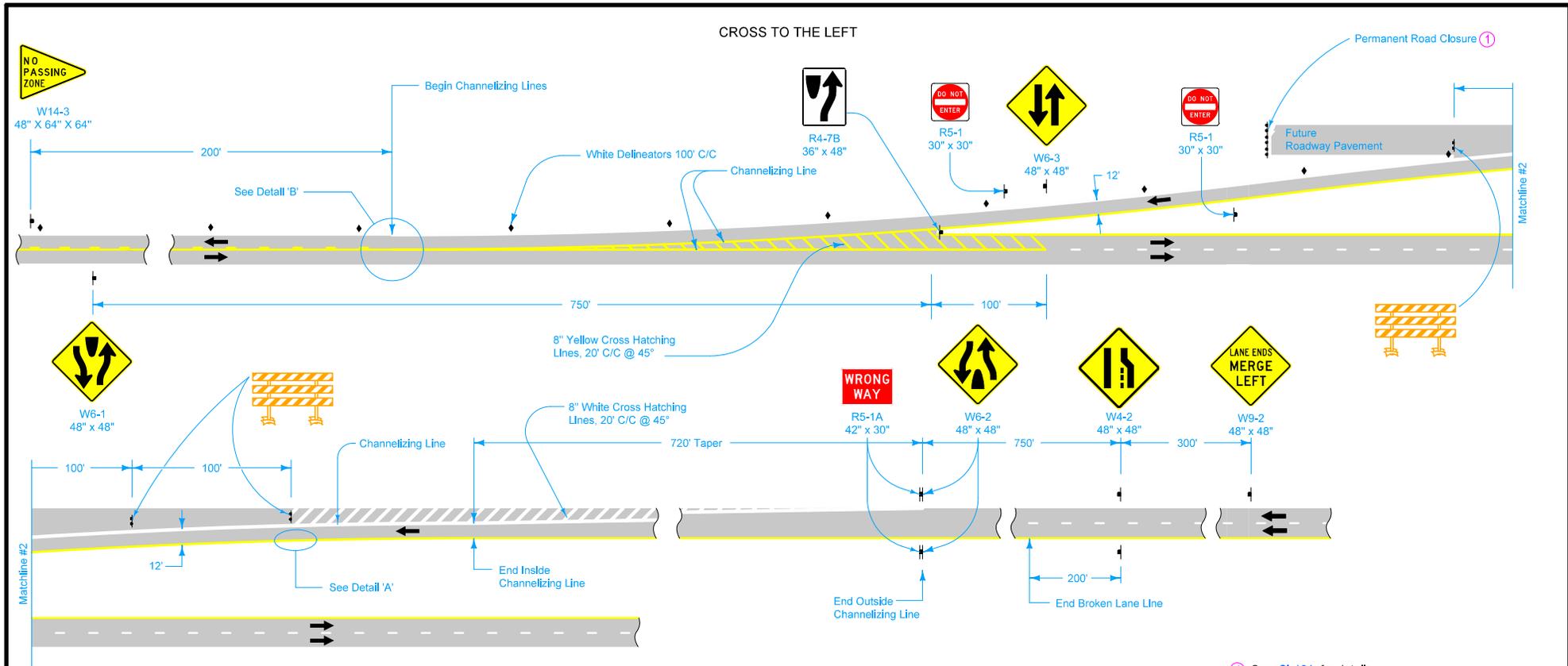
LEGEND	
	Traffic Sign
	Type III Barricade
	Delineator
	Direction of Traffic



Place yellow warning signs with black legend and symbols.

Place Type III barricades complying with Section 2B.67 of the MUTCD.

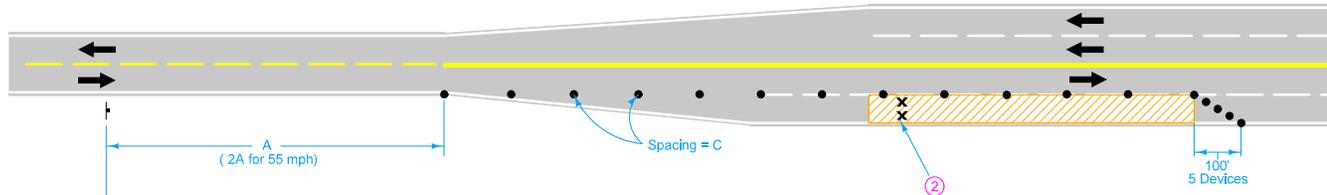
	REVISION
	9 10-20-20
	STANDARD ROAD PLAN
TC-62	
SHEET 1 of 2	
REVISIONS: Modified Type III barricades note from Section 3F.01 to Section 2B.67.	
APPROVED BY DESIGN METHODS ENGINEER	
PERMANENT TWO-LANE TO FOUR-LANE DIVIDED TRANSITION	



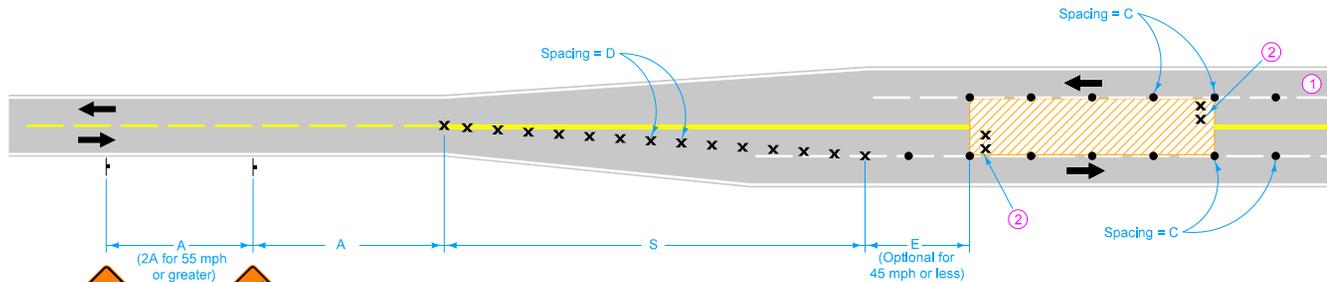
① See SI-181 for details.

LEGEND	
	Traffic Sign
	Type III Barricade
	Delineator
	Direction of Traffic

 STANDARD ROAD PLAN	REVISION
	9 10-20-20
	TC-62
SHEET 2 of 2	
REVISIONS: Modified Type III barricades note from Section 3F.01 to Section 2B.67.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
PERMANENT TWO-LANE TO FOUR-LANE DIVIDED TRANSITION	



ROAD WORK AHEAD
W20-1
48" x 48"



ROAD WORK AHEAD
W20-1
48" x 48"

LANE SHIFT
W1-4R
48" x 48"

LEGEND

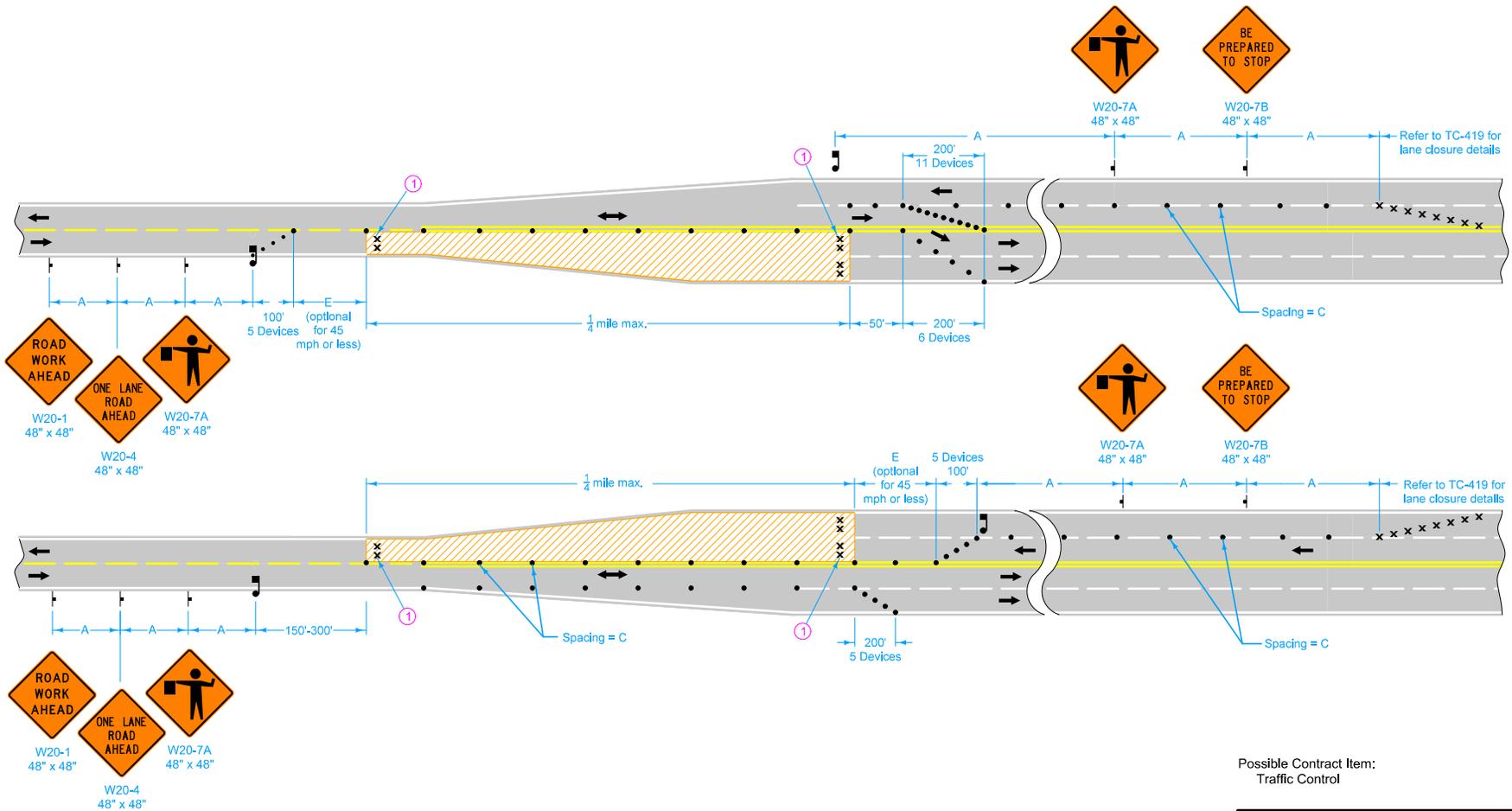
- ┆ Traffic Sign
- 42" Channelizer
- ✕ Drum
- ▨ Work Area
- ← Direction of Traffic

SPEED LIMIT	A	C	D	E	S
25 or less	100'	40'	25'	0' - 200'	100'
30 - 35	250'	40'	30'	0' - 200'	120'
40 - 45	350'	80'	40'	0' - 400'	280'
50 - 55	500'	100'	50'	200' - 400'	350'

- ① Refer to TC-419 for lane closure details.
- ② For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:
Traffic Control

 STANDARD ROAD PLAN	REVISION
	3 10-16-18
	TC-63
SHEET 1 of 1	
REVISIONS: Added circle note 2 and drums in work area. Updated DOT logo.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE AT TWO-LANE TO FOUR-LANE TRANSITION	



Possible Contract Item:
Traffic Control

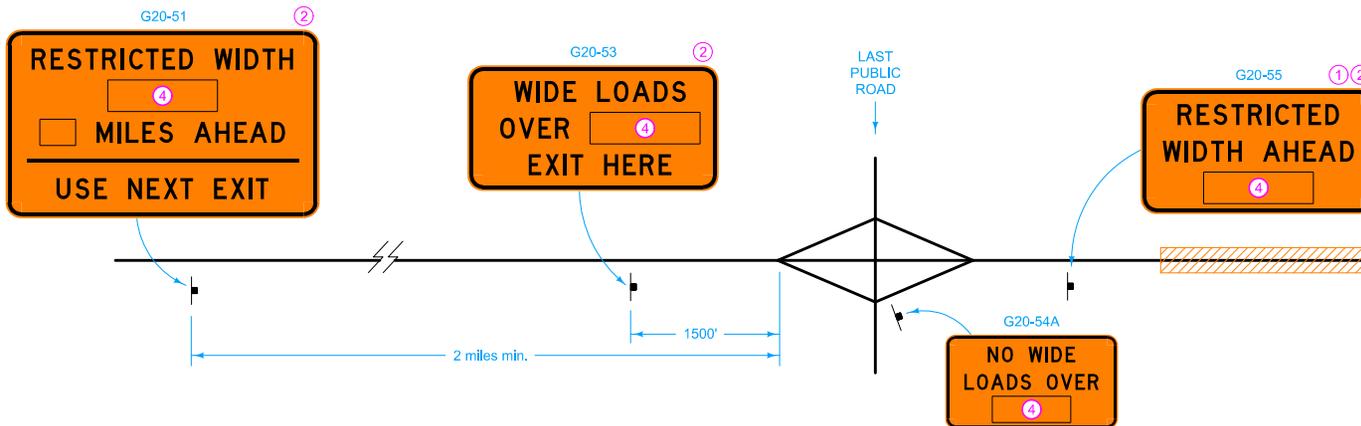
	REVISION
	2 10-16-18
STANDARD ROAD PLAN	TC-64
	SHEET 1 of 1
<small>REVISIONS: Added circle note 1 and drums in the work area. Updated DOT logo.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE AT TWO-LANE TO FOUR-LANE TRANSITION WITH FLAGGER	

LEGEND

- Flagger
- Traffic Sign
- 42' Channelizer
- Drum
- Work Area
- Direction of Traffic

SPEED LIMIT	A	C	E
25 or less	100'	40'	0' - 200'
30 - 35	250'	40'	0' - 200'
40 - 45	350'	80'	0' - 200'
50 - 55	500'	100'	200' - 300'

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.



WHERE AN INTERCHANGE IS LOCATED AT THE LAST PUBLIC ROAD PRIOR TO AREA OF RESTRICTED WIDTH

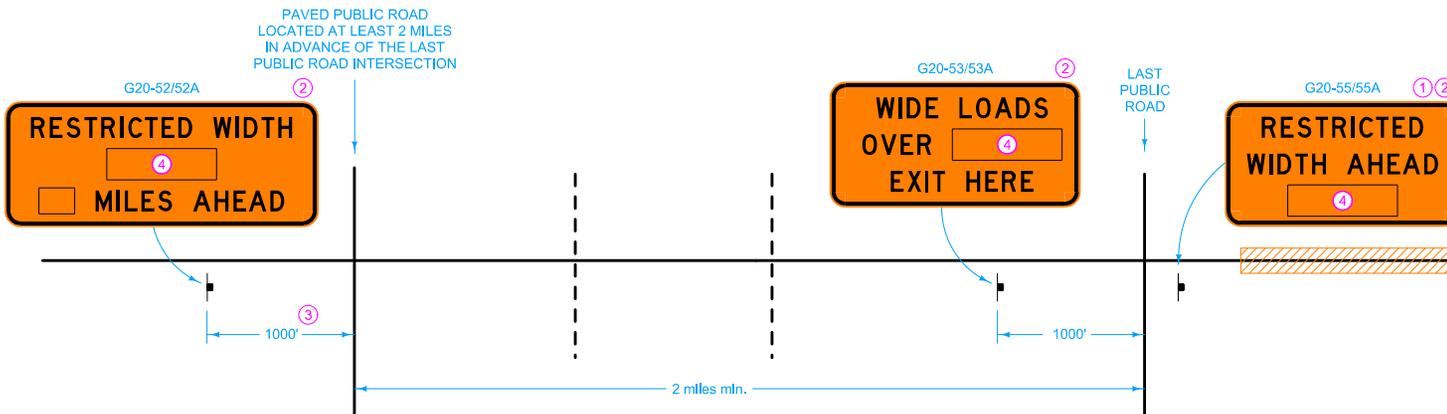
Coordinate signing in conjunction with other traffic control in the area.

Exact sign locations will be as approved by the Engineer.

For multi-lane divided roadways, use larger sign sizes. For two-lane highways, use small sign sizes.

See SI-882 for sign details.

- ① Place after ROAD WORK AHEAD sign.
- ② For divided highways, install two signs at each location: One each on right and left shoulders.
- ③ When this paved road intersection has an interchange, measure the distance from the beginning of the exit ramp taper.
- ④ Dimension on G20-58/58A panel equals 1 foot less than narrowest measurement.



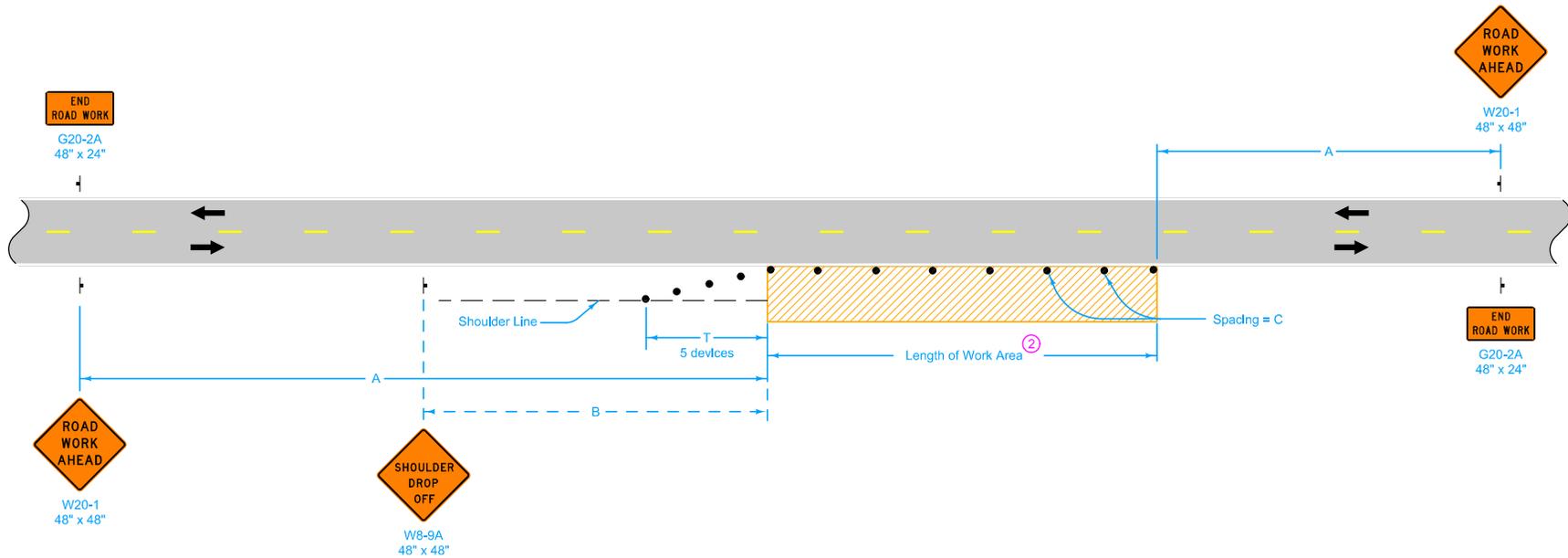
WHERE AN AT-GRADE INTERSECTION IS LOCATED AT THE LAST PUBLIC ROAD PRIOR TO AREA OF RESTRICTED WIDTH

Possible Contract Item:
Traffic Control

LEGEND	
	Area of Restricted Width
	Traffic Sign

	REVISION
	2 10-15-19
STANDARD ROAD PLAN	TC-81
SHEET 1 of 1	
REVISIONS: New logo.	
APPROVED BY DESIGN METHODS ENGINEER	

**RESTRICTED WIDTH SIGNING
(LESS THAN 14.5 FEET)**



When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.L2 of the Standard Specifications.

For work lasting less than one hour, refer to TC-1.

① When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

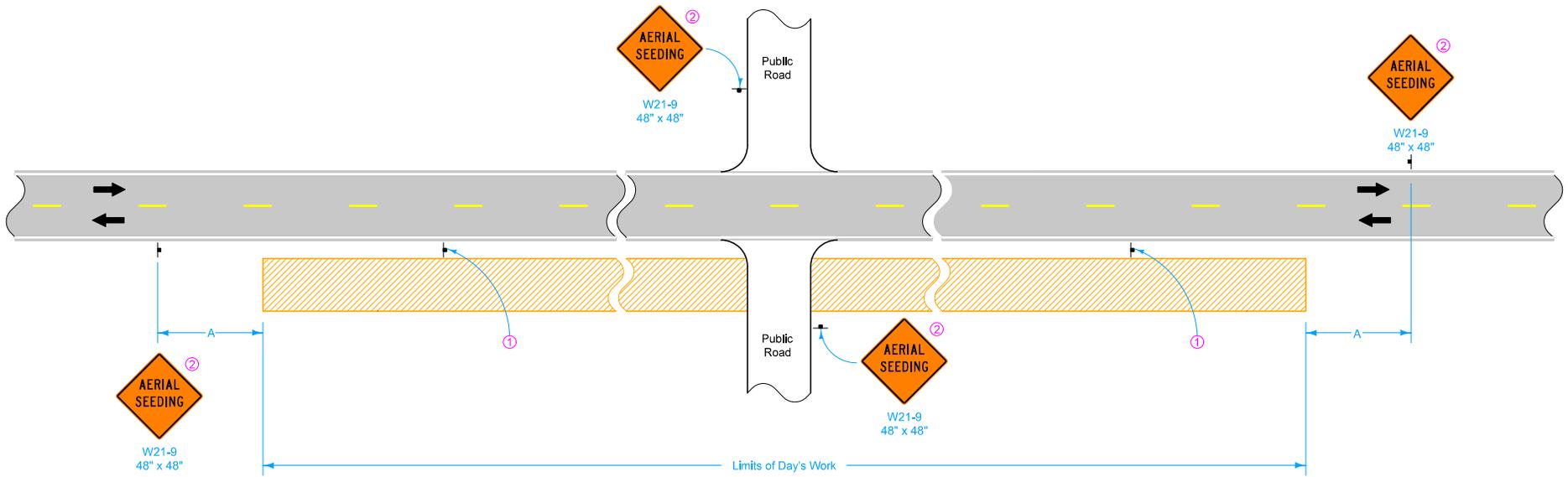
② For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

Possible Contract Item:
Traffic Control

LEGEND	
	Traffic Sign
	42" Channelizer
	Work Area
	Direction of Traffic

SPEED LIMIT (mph)	A	B	C ②	T
35 or less	500'	250'	40'	100'
40 - 45	700'	350'	80' ①	200'
50 or greater	1000'	500'	100' ①	200'

	REVISION
	8 04-21-15
	TC-202
STANDARD ROAD PLAN	
SHEET 1 of 1	
<small>REVISIONS: Modified general notes, changed title and replaced the DOT logo in the title block with the new version.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
WORK WITHIN 15 FT OF TRAVELED WAY	



- ① Place AERIAL SEEDING signs along the mainline at a maximum spacing of 3 miles.
- ② Refer to [SI-881](#) for sign details.

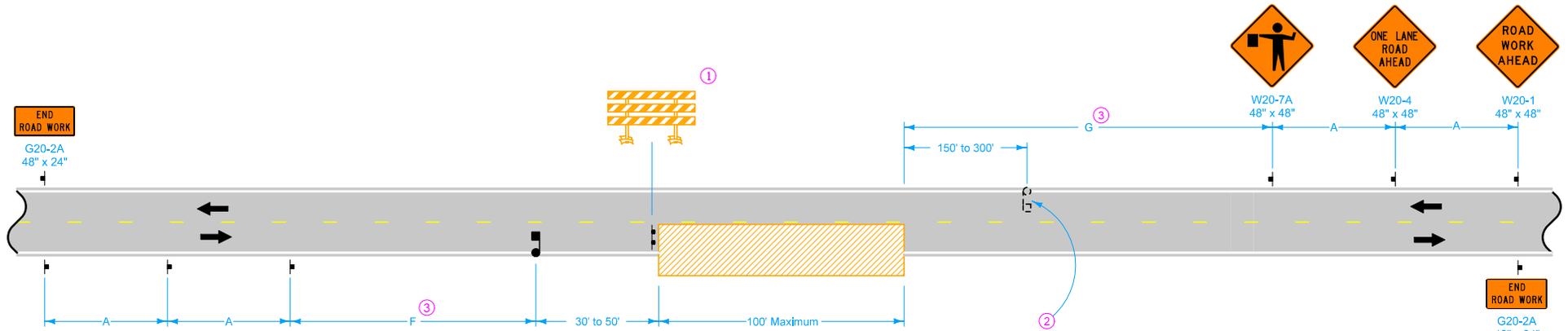
Possible Contract Item:
Traffic Control

LEGEND	
	Traffic Sign
	Work Area
	Direction of Traffic

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

IOWA DOT	REVISION	
	4	10-15-19
STANDARD ROAD PLAN	TC-203	
REVISIONS: New logo.		
<i>Handwritten Signature</i>		
APPROVED BY DESIGN METHODS ENGINEER		
AERIAL SEEDING OPERATIONS		

DO NOT USE ON PRIMARY ROADWAYS



SPEED LIMIT (mph)	A	F and G Range	F + G Max.
35 or less	250'	250'-3250'	3500'
40 - 45	350'	350'-3350'	3700'
50 or greater	500'	500'-3500'	4000'

LEGEND

- Traffic Sign
- Flagger
- Work Area
- Type III Barricade
- Direction of Traffic

Use only during daylight hours. Typical applications include:
 Pavment repair
 Bridge repair when signals are not required.
 Guardrail connections at bridge.
 Secondary road intersections with Primary road.
 Sawing for ful depth patch
 Joint sealing
 PR joints
 Surface patching
 Crack sealing

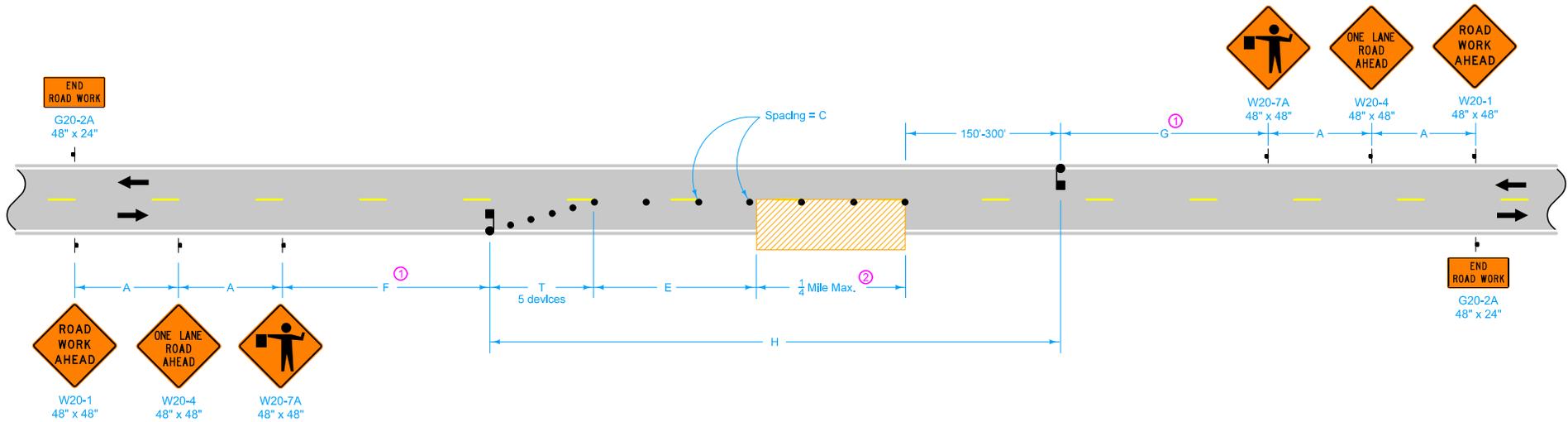
No parking on opposite shoulder within 500 feet of work area.

Ensure traffic in the open lane flows freely. Stop the first vehicle in the closed lane from the position shown, then cross the traffic lane to stop other vehicles.

- ① A vehicle with an amber revolving light or amber strobe light may be substituted for the Type III barricade.
- ② Provide a second flagger if:
 The flagger's view of approaching traffic in the open lane is less than 1/4 mile or the work site is in an area of restricted sight distance, such as a No Passing zone, or
 Excessive traffic delays are encountered.
- ③ F and G distances are to remain as near minimum values as work permits. However, to be able to move the work area without moving the advance signing, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.

Possible Contract Items:
 Flaggers
 Traffic Control

	REVISION
	6 04-21-20
STANDARD ROAD PLAN	TC-212
SHEET 1 of 1	
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS and new general notes.	
APPROVED BY DESIGN METHODS ENGINEER	
SPOT LOCATION LANE CLOSURE WITH FLAGGERS	



LEGEND

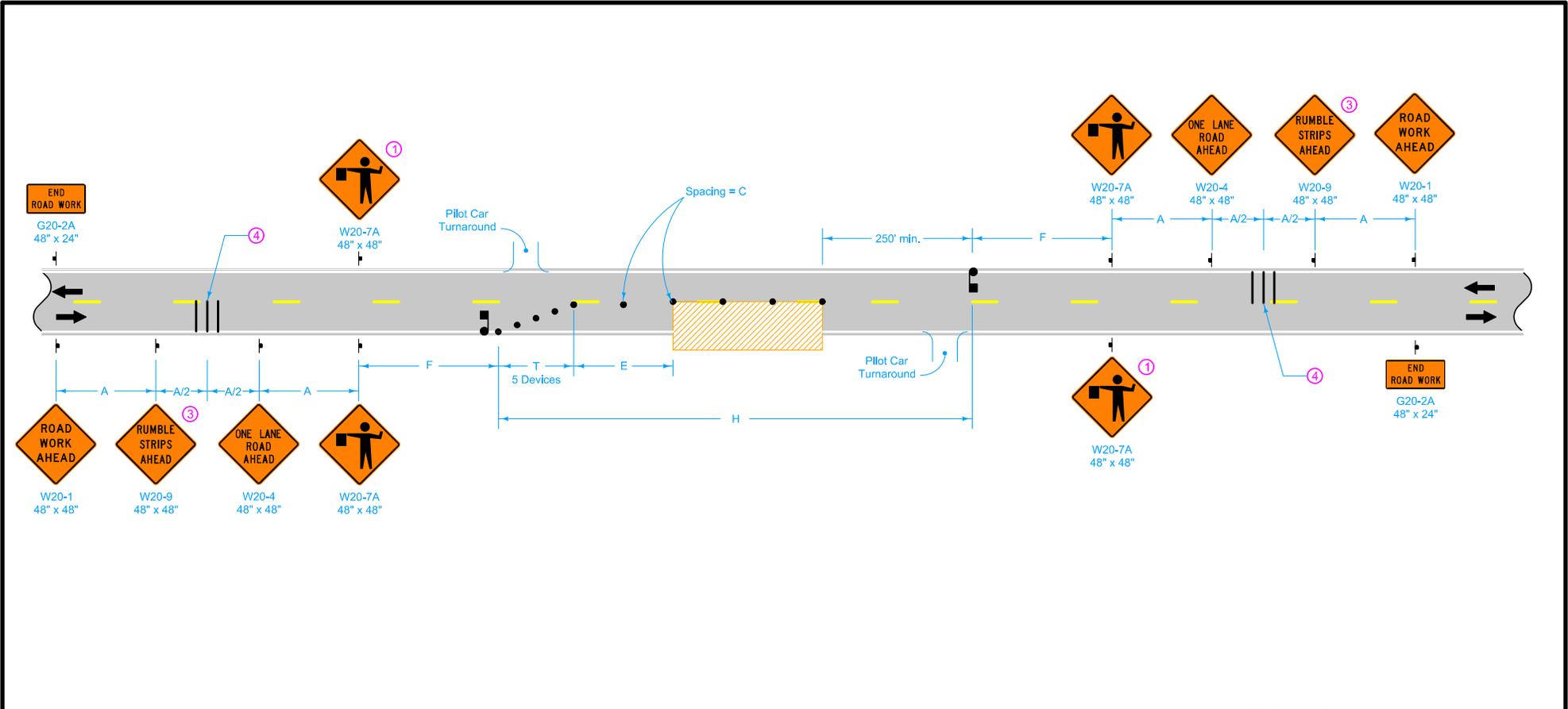
- Traffic Sign
- Flagger
- 42" Channelizer
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	C	E	F and G Range ^①	F + G Max.	H Max.	T
35 or less	250'	40'	0'-200'	500'-3000'	3500'	2000'	50'
40 - 45	350'	80'	0'-200'	700'-3000'	3700'	2000'	100'
50 or greater	500'	100'	200'-300'	1000'-3000'	4000'	2000'	100'

- ① Keep F and G distances as near to minimum values as work permits. However, to allow advancement of the work area without moving signs, F and G distances may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.
- ② If length of work area exceeds 1/4 mile, use **TC-214**.

Possible Contract Items:
 Flaggers
 Traffic Control

	REVISION
	4 10-15-19
STANDARD ROAD PLAN	TC-213
REVISIONS: New logo.	SHEET 1 of 1
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE WITH FLAGGERS	



LEGEND

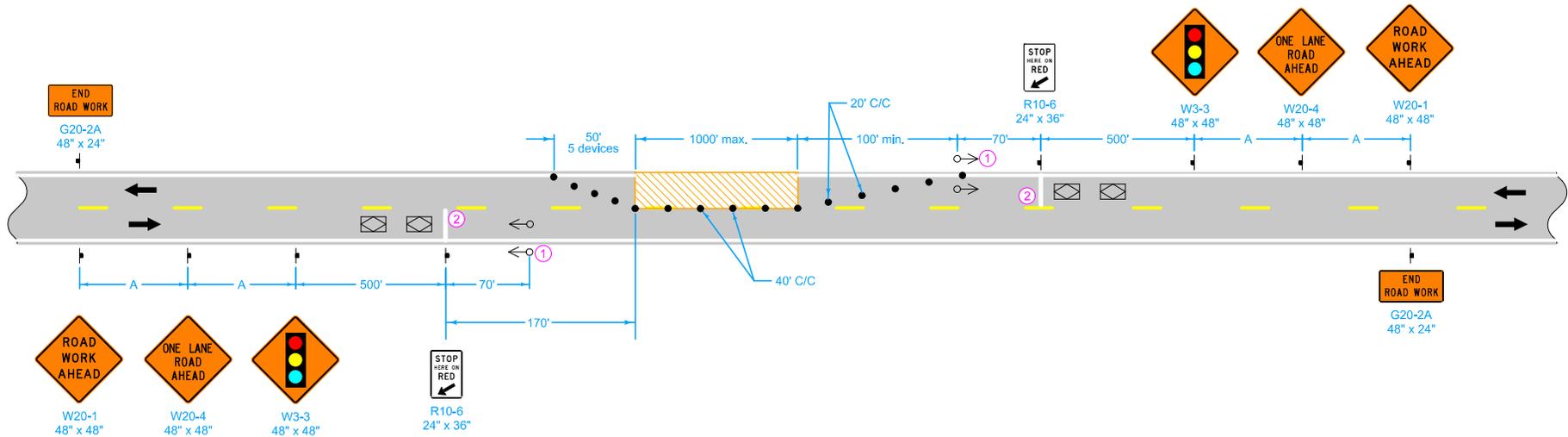
- Traffic Sign
- Flagger
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable Rumble Strip Panel

SPEED LIMIT (mph)	ADT	A	C	E	F	H max.	T
35 or less	up to 2,500	250'	40'	0'-200'	500'	2.5 mi.	50'
	2,500 - 5,000	250'	40'	0'-200'	500'	2.0 mi.	50'
	more than 5,000	500'	40'	0'-200'	1000'	1.5 mi.	50'
40 - 45	up to 2,500	350'	80'	0'-200'	700'	2.5 mi.	100'
	2,500 - 5,000	350'	80'	0'-200'	700'	2.0 mi.	100'
	more than 5,000	700'	80'	0'-200'	1400'	1.5 mi.	100'
50 or greater	up to 2,500	500'	160'	200'-300'	1000'	2.5 mi.	100'
	2,500 - 5,000	500'	160'	200'-300'	1000'	2.0 mi.	100'
	more than 5,000	1000'	160'	200'-300'	2000'	1.5 mi.	100'

- ① Sign optional for ADT less than 5,000.
- ② In rural areas, as work activity nears the downstream limits of dimension H, the lane closure may be extended up to 1.0 mile beyond the maximum distance, H, shown in the table. After the traffic control devices have been placed to extend the closure and after work activity has progressed, the advanced signing and devices at the beginning of the traffic control zone should be moved downstream so that the H distance is once again within the limits shown in the table. This one-mile extension will not be allowed during any peak traffic hours listed in the contract documents.
- ③ Refer to SI-881 for sign details.
- ④ For traffic control zones lasting more than 2 hours, place temporary Portable Rumble Strip Panel.

Possible Contract Items:
 Flagger
 Pilot Car
 Traffic Control

IOWA DOT	REVISION	
	8	4-21-20
STANDARD ROAD PLAN		TC-214
REVISIONS: Modified circle note 4.		SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER		
LANE CLOSURE WITH FLAGGERS FOR USE WITH PILOT CAR		



SPEED LIMIT (mph)	A
35 or less	250'
40-45	350'
50 or greater	500'

This layout is for conditions lasting up to three calendar days. For situations lasting longer than three days refer to **TC-216**.

- ① For Temporary Traffic Signals, meet the requirements of Section 2528.03 of the Standard Specifications except for the following: In lieu of a trailer or span-wire mounted system, signal heads may be located on the shoulders, one on each side of the roadway. Mount shoulder signal heads a minimum of 8 feet from the bottom of the signal head to the top of the ground surface.
- ② 24-inch stop lines required during nighttime operation.

Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Temporary Traffic Signals
 Traffic Control

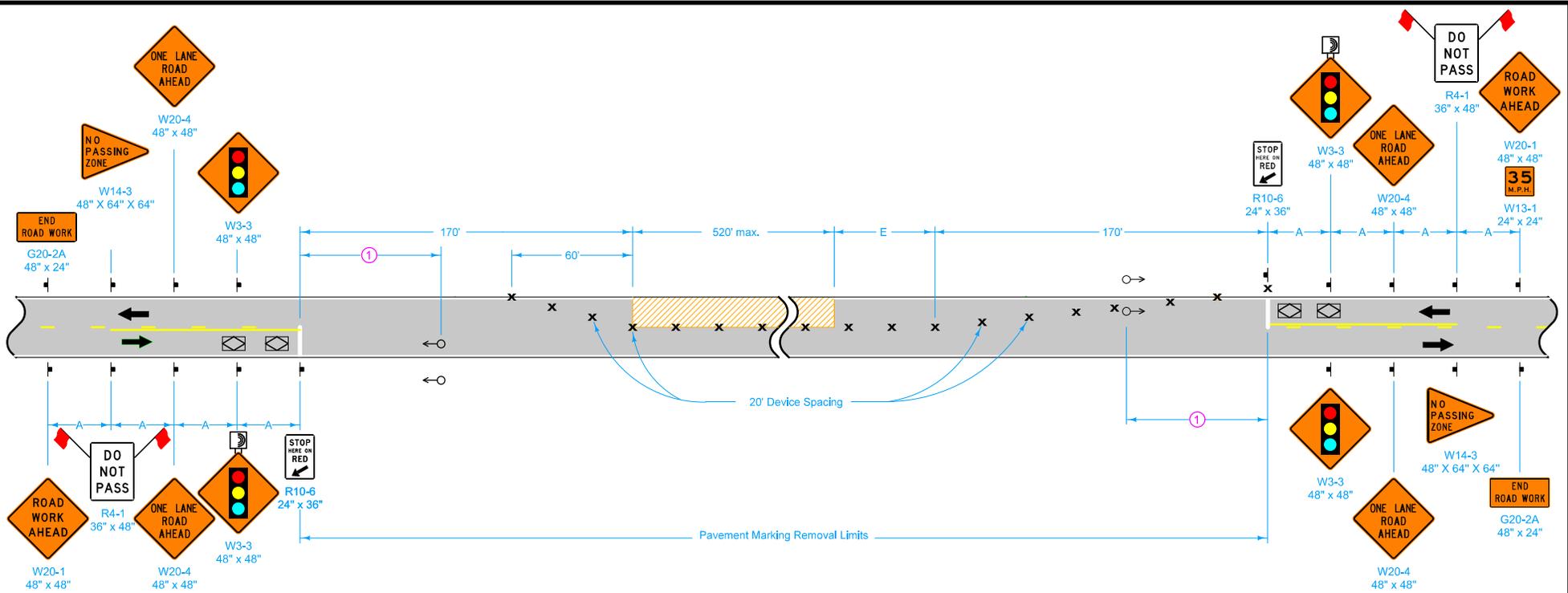
Possible Tabulations:
 108-22
 108-28

LEGEND	
	Vehicle Detection Area
	Temporary Traffic Signal
	Traffic Sign
	42" Channelizer
	Work Area
	Direction of Traffic

TIMING FOR ACTUATED SIGNALS			
Recommended Settings (secs)			
Distance between stop lines	All Red* (secs)	Distance between stop lines	All Red* (secs)
450'	9 - 15	950'	19 - 33
550'	11 - 19	1050'	21 - 36
650'	13 - 22	1150'	23 - 39
750'	15 - 26	1250'	25 - 43
850'	17 - 29	1350'	27 - 46

* All Red values based on operating speeds between 20 mph and 35 mph

	REVISION
	4 10-15-19
STANDARD ROAD PLAN	TC-215
SHEET 1 of 1	
<small>REVISIONS: Added Vehicle Detection Area graphic.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE WITH SIGNALS (UP TO THREE DAYS)	



No drop-offs greater than pavement depth will be allowed during non-working hours.

No vehicles, unattended equipment, materials or stock-piled waste are permitted between the shoulder lines during non-working hours.

① Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

LEGEND

- Vehicle Detection Area
- Traffic Sign
- Drum
- Type 'B' High-Intensity Flashing Warning Light
- Work Area
- Temporary Traffic Signal
- Direction of Traffic

TIMING FOR ACTUATED SIGNALS

Recommended Settings, secs.

Initial = 12.0
 Extension = 2.5
 Maximum Green = 45.0
 Yellow = 5.0
 All Red = (see table)

Distance Between Stop Lines	All Red (secs.)*
1050'	20.4-35.7
950'	18.5-32.3
850'	17-30
750'	15-27
650'	14-23
550'	12-20

* Range of values are based on operating speeds between 20 and 35 mph

SPEED LIMIT (mph)	A	E
35 or less	250'	0'-50'
40 - 45	350'	0'-100'
50 or greater	500'	100'

Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Temporary Traffic Signals
 Traffic Control

Possible Tabulations:
 108-22
 108-28

IOWA DOT

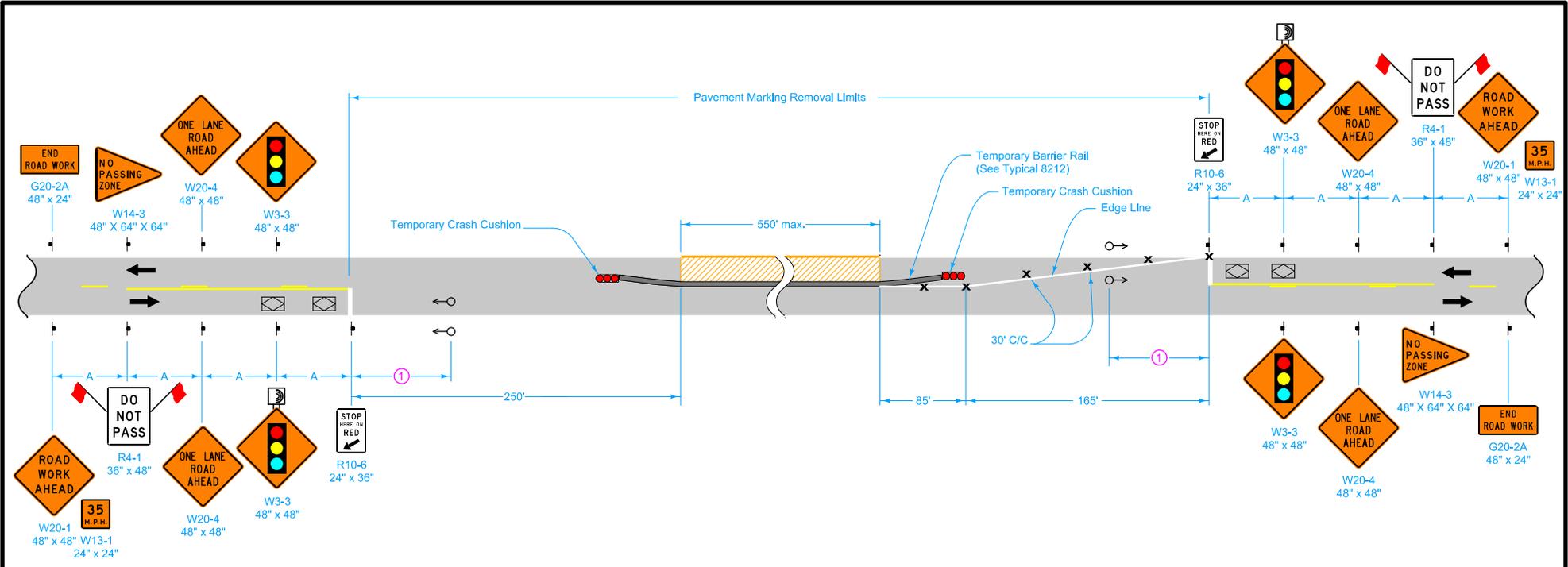
STANDARD ROAD PLAN

REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".

Brian Smith
 APPROVED BY DESIGN METHODS ENGINEER

REVISION	7	10-18-16
TC-216		
SHEET 1 of 1		

LANE CLOSURE WITH SIGNALS



LEGEND

- Vehicle Detection Area
- Temporary Crash Cushion
- Direction of Traffic
- Traffic Sign
- Drum
- Type 'B' High-Intensity Flashing Warning Light
- Work Area
- Temporary Traffic Signal

TIMING FOR ACTUATED SIGNALS
Recommended Settings, secs.

Distance Between Stop Lines	All Red (secs.)*
1050'	20.4-35.7
950'	18.5-32.3
850'	17-30
750'	15-27
650'	14-23
550'	12-20

* Range of values are based on operating speeds between 20 and 35 mph

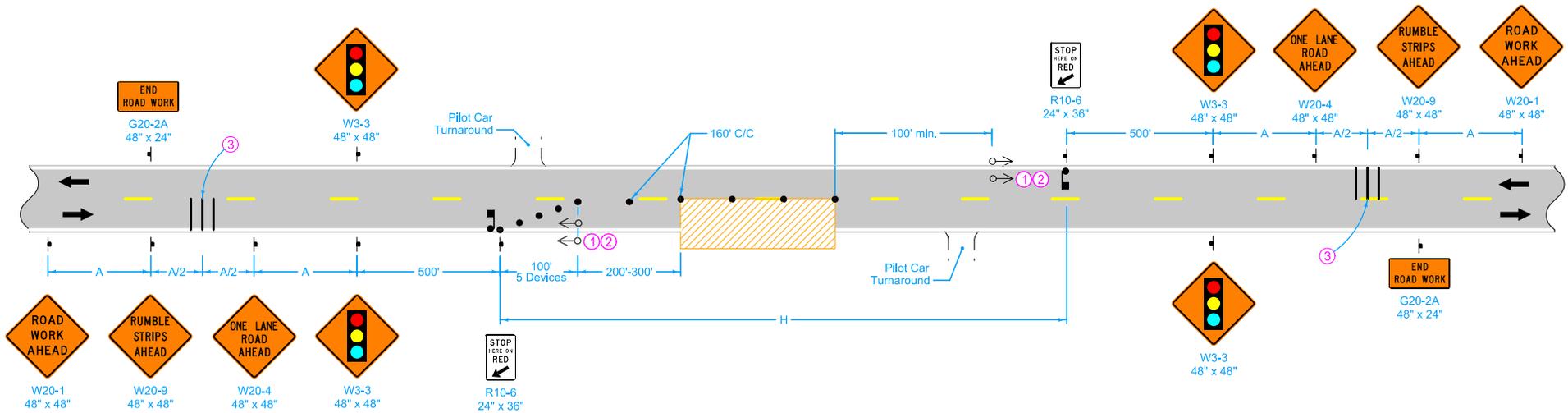
SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

- Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Temporary Barrier Rail
 Temporary Crash Cushions
 Temporary Traffic Signals
 Traffic Control
- Possible Tabulations:
 108-22
 108-28
 108-30
 108-33

Place Concrete Barrier Markers at 10 ft C/C on bridge rail.

① Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

IOWA DOT STANDARD ROAD PLAN	REVISION
	8 10-18-16
	TC-217
SHEET 1 of 1	
REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".	
<i>Brian Smith</i> APPROVED BY DESIGN METHODS ENGINEER	
LANE CLOSURE WITH SIGNALS AND TBR	



LEGEND

- Flagger
- Temporary Traffic Signal
- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable Rumble Strip Panel

SPEED LIMIT (mph)	ADT	A	H
50 or greater	up to 2,500	500'	2.5 mi.
	2,500 - 5,000	500'	2.0 mi.
	more than 5,000	1000'	1.5 mi.

No detection area required.

Timing for Push-button Actuated Signals
 Initial Green = 15 sec.
 Green Ext. = 2.5 sec.
 Yellow = 4.0 sec.

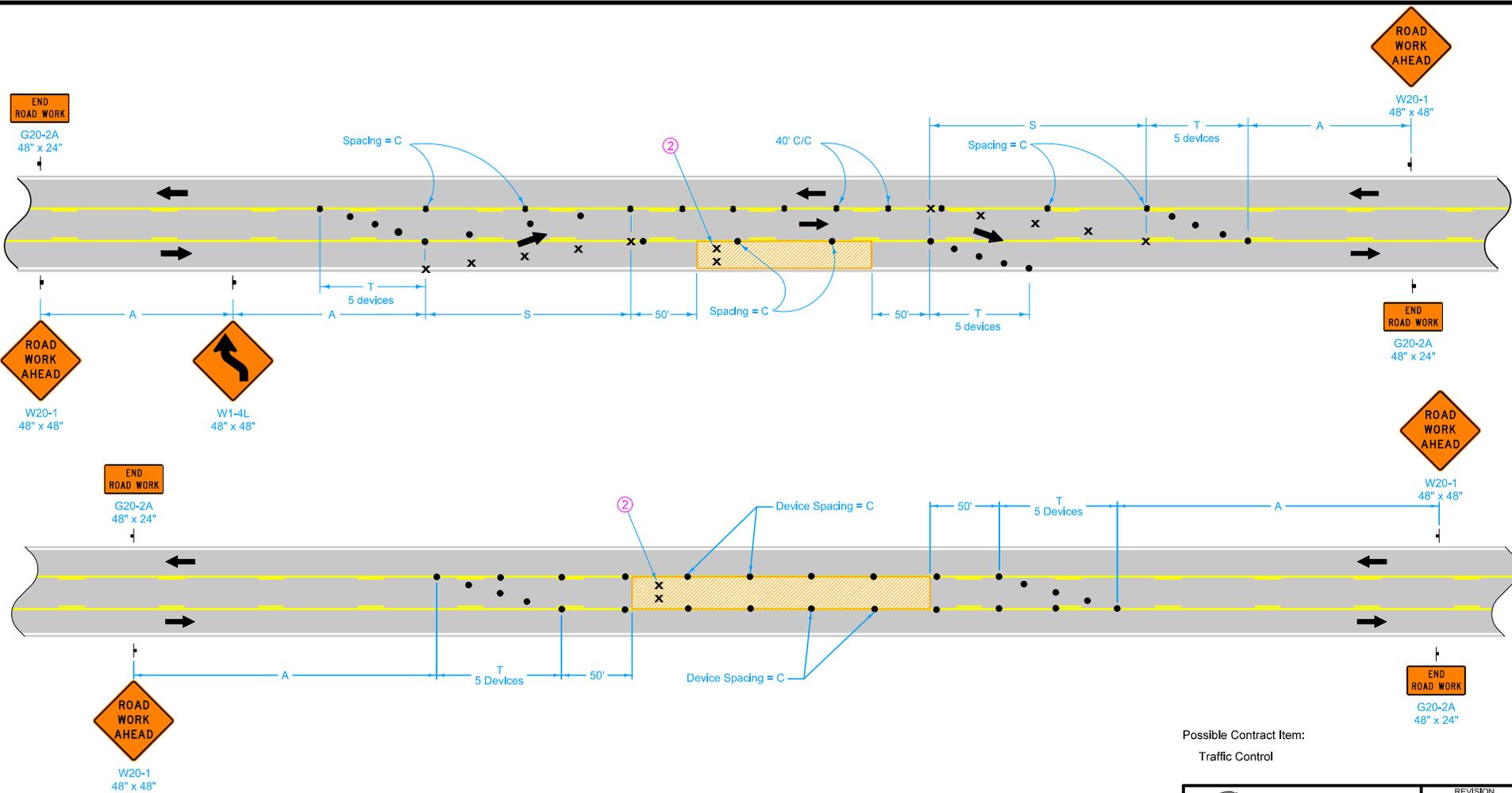
Install push-button actuated traffic signals.
 Program signals to rest in RED.
 GREEN and GREEN EXTENSION only are initiated by flagger.

- ① For Temporary Traffic Signals, meet the requirements of Section 2528.03 of the Standard Specifications except for the following:
 In lieu of a trailer or span-wire mounted system, signal heads may be located on the shoulders, one on each side of the roadway. Mount shoulder signal heads a minimum of 8 feet from the bottom of the signal head to the top of the ground surface.
- ② Locate signal heads 70 to 100 feet beyond "STOP HERE ON RED" sign. Adjust location of signal heads as field conditions warrant.
- ③ For traffic control zones lasting more than 2 hours, place temporary Portable Rumble Strip Panel.

Possible Contract Items:
 Flagger
 Pilot Car
 Temporary Traffic Signal
 Traffic Control

Possible Tabulations:
 108-27
 108-28

	REVISION
	6 4-21-20
STANDARD ROAD PLAN	TC-218
REVISIONS: Modified circle note 3.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
LANE CLOSURE WITH PILOT CAR AND FLAGGER OPERATED SIGNALS	



LEGEND

- 42" Channelizer
- ⊗ Drum ①
- ⊣ Traffic Sign
- ▨ Work Area
- ← Direction of Traffic

SPEED LIMIT (mph)	A	C	D	S	T
25 or less	100'	40'	25'	100'	50'
30 - 35	250'	40'	30'	120'	50'
40 - 45	350'	80'	40'	280'	100'
50 or greater	500'	100'	50'	350'	100'

- ① Spacing = D for drums placed in tapers.
- ② For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:
Traffic Control

STANDARD ROAD PLAN

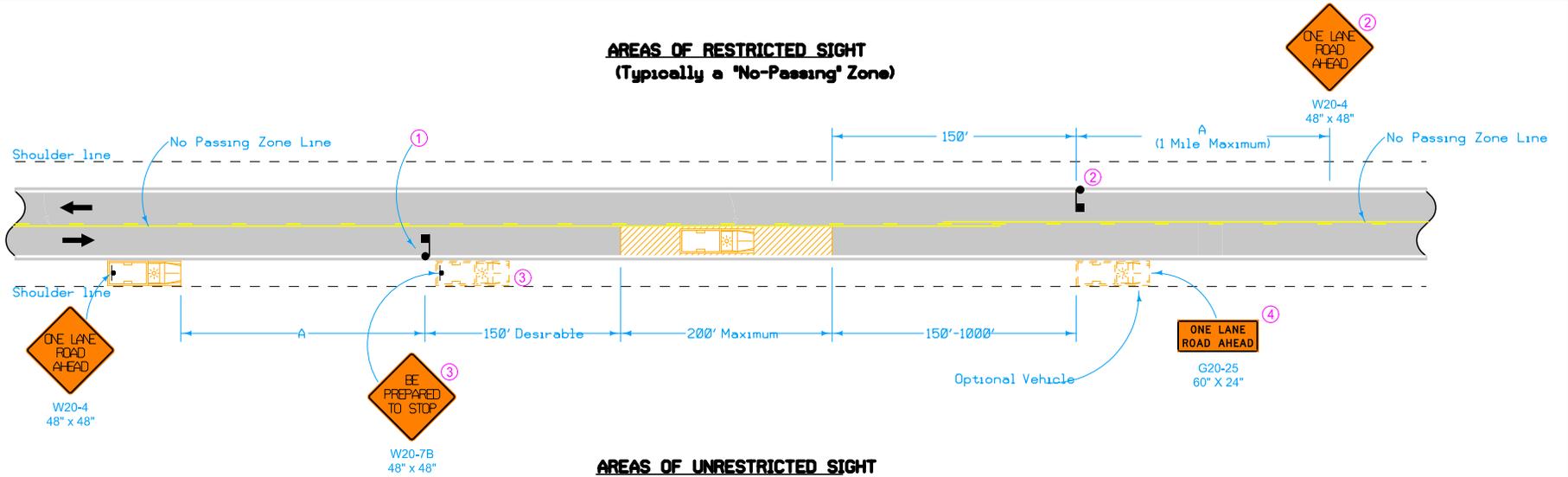
REVISIONS: Added circle note 2 and drums in work area. Updated DOT logo.

APPROVED BY DESIGN METHODS ENGINEER

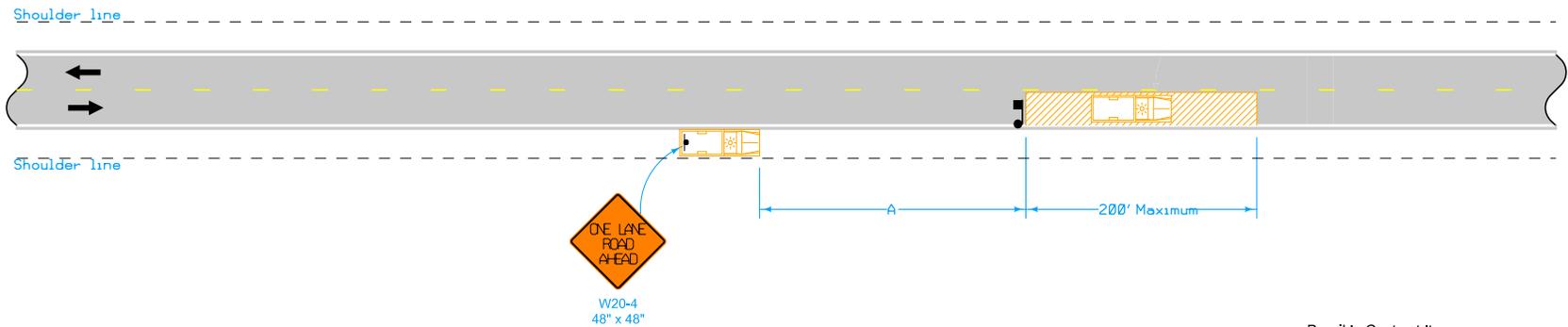
REVISION	5	10-16-18
SHEET 1 of 1	TC-228	

LANE CLOSURE
INVOLVING TWLTL

AREAS OF RESTRICTED SIGHT
(Typically a 'No-Passing' Zone)



AREAS OF UNRESTRICTED SIGHT



This layout is intended for use with slow-moving operations or with operations involving stops not to exceed 15 minutes. For stops exceeding 15 minutes or in heavy traffic situations, use [TC-213](#).

Equip all vehicles with an amber revolving light or an amber strobe light.

- ① When a stop is made in an area of restricted sight distance, use a flagger to hold traffic in the closed lane and allow traffic to pass when conditions are safe.
- ② When a stop is made or work proceeds in an area where sight distance is restricted from either direction and is anticipated to be more than 5 minutes, a second flagger and ONE LANE ROAD AHEAD sign is required.
- ③ This vehicle and sign may be used in lieu of a flagger for Falling Weight Deflectometer tests.
- ④ Refer to [SI-881](#) for sign details.

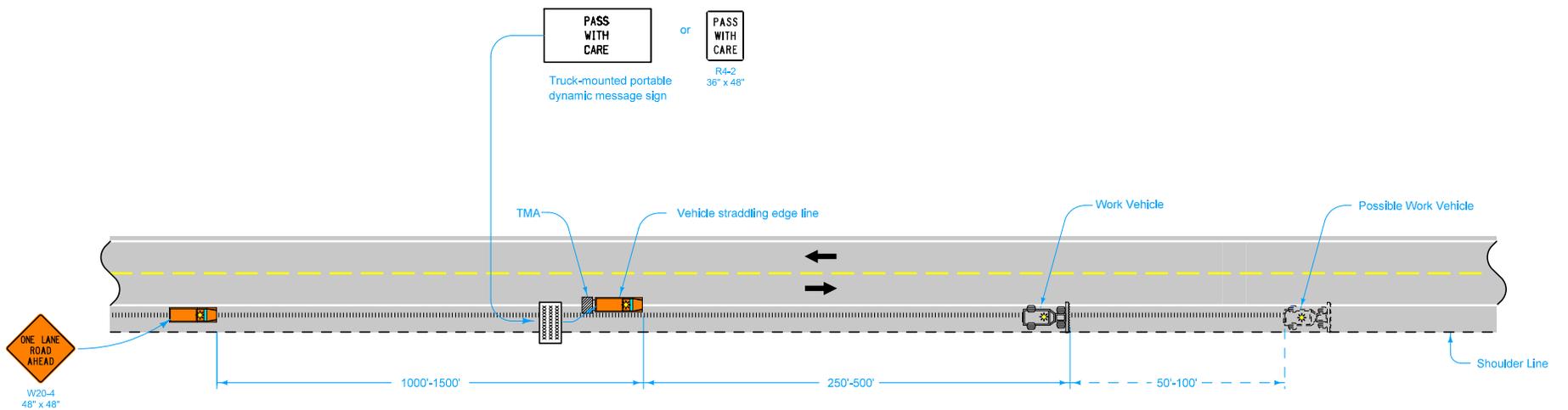
Possible Contract Items:
Flaggers
Traffic Control

LEGEND

- ← Direction of Traffic
- ⚠ Flagger
- ⚠ Traffic Sign
- ▨ Work Area
- 🚚 Work Vehicle

Speed Limit (mph)	A min.
25 or less	200'
30-35	300'
40-45	500'
50 or greater	1000'

	REVISION
	3 10-15-19
STANDARD ROAD PLAN	TC-231
	SHEET 1 of 1
REVISIONS: New logo.	
APPROVED BY DESIGN METHODS ENGINEER	
SLOW MOVING VEHICLE OPERATING IN THE TRAFFIC LANE	



Possible Contract Item:
Traffic Control

When fog sealing the milled rumble strips, place a 48" X 48" FRESH OIL sign (W21-2) at the beginning of the work area. Place additional FRESH OIL signs after each intersection and periodically through the work area so that signs are no more than 2 miles apart.

Operators should adjust their spacing, as necessary, to keep adjacent vehicles within view.

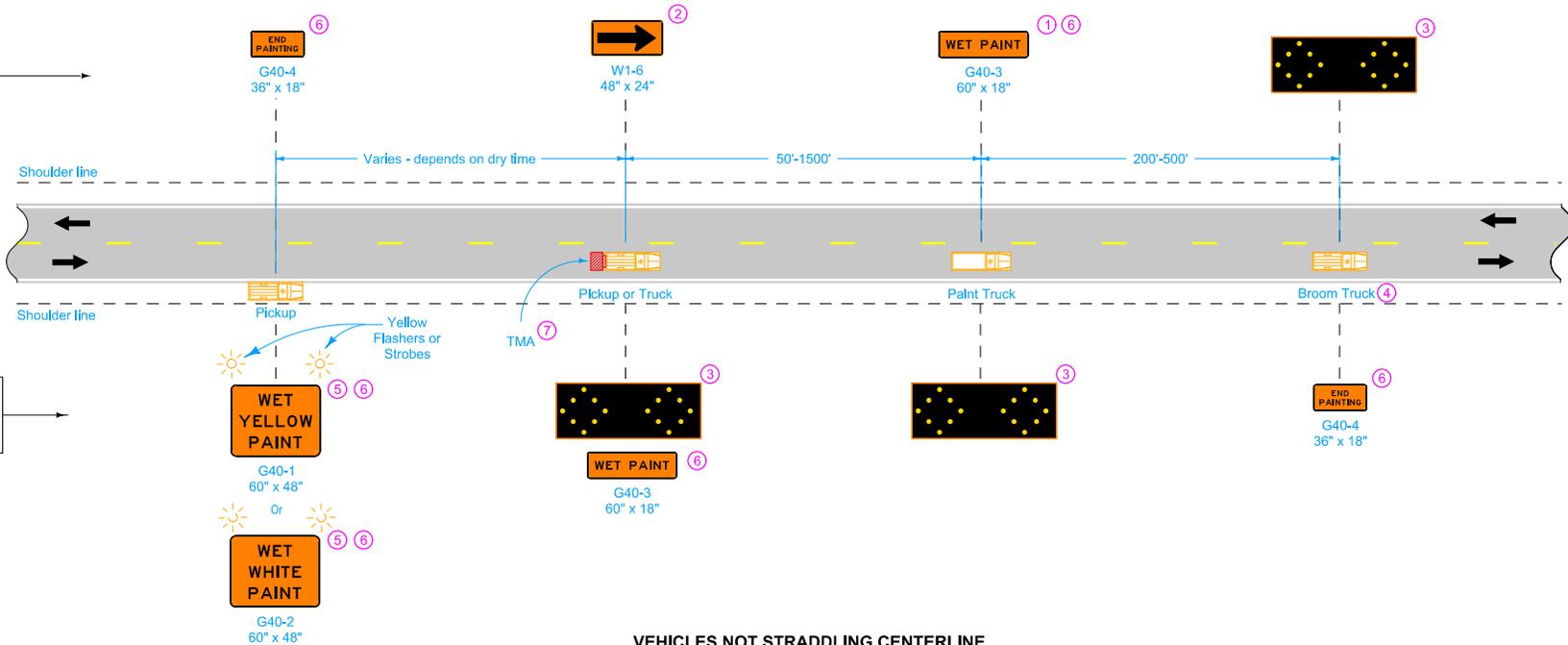
Equip all vehicles with an amber revolving light or amber strobe light.

LEGEND	
	Traffic Sign
	Truck Mounted Attenuator (TMA)
	Direction of Traffic

	REVISION
	4 10-21-14
STANDARD ROAD PLAN	TC-232
SHEET 1 of 1	
REVISIONS: Changed "changeable message sign" to "portable dynamic message sign".	
 APPROVED BY DESIGN METHODS ENGINEER	
SHOULDER RUMBLE STRIP OPERATIONS	

SIGNS FACING OPPOSING TRAFFIC

SIGNS FACING TRAFFIC APPROACHING FROM THE REAR



VEHICLES NOT STRADDLING CENTERLINE

This layout may be used when painting edgeline or centerline markings.

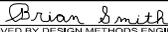
Equip all vehicles with an amber revolving light or amber strobe light.

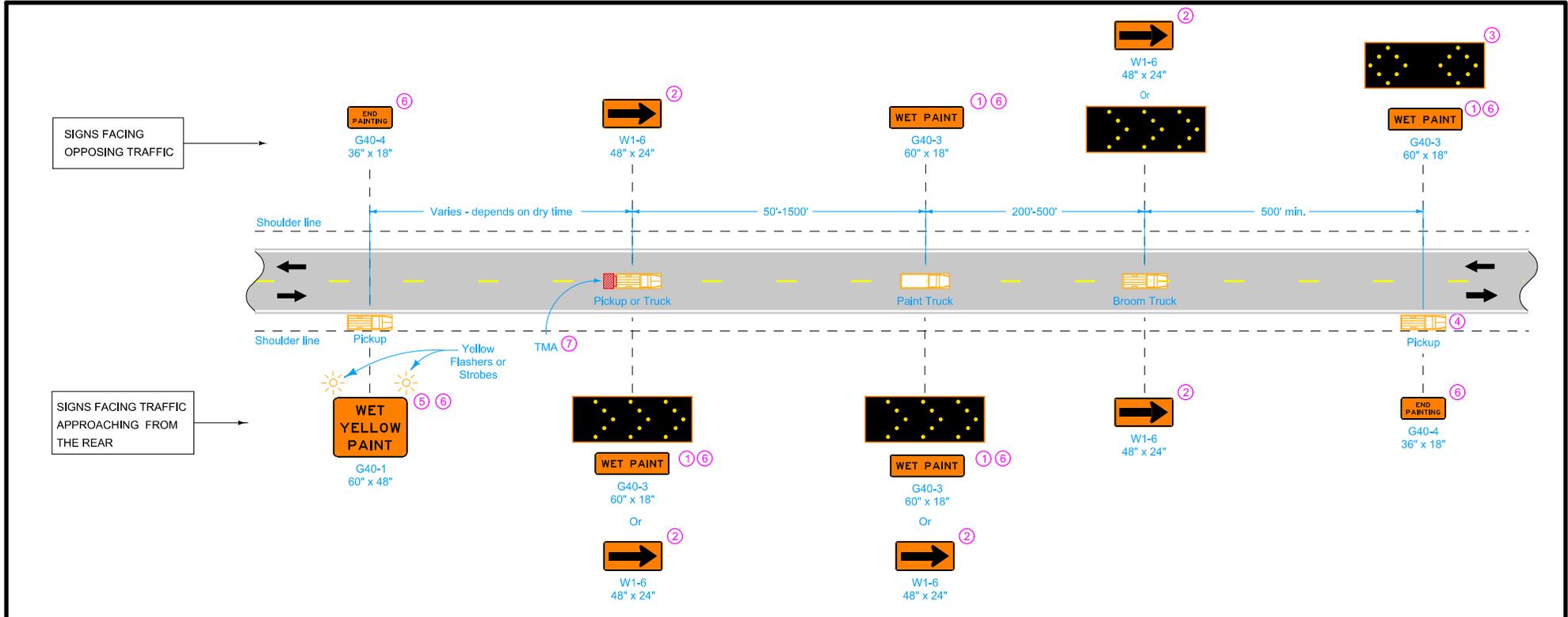
Possible Contract Item:
Traffic Control

- ① Use this sign when painting centerline markings.
- ② Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ③ This arrow board may be operated in a four-corner caution mode.
- ④ Move this vehicle to the shoulder to accommodate passing traffic.
- ⑤ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ⑥ Refer to SI-881 for sign details.
- ⑦ TMA required for speed limits of 55 mph or greater and ADT greater than 3,000.

LEGEND

- ← Direction of Traffic
- ▨ Truck-Mounted Attenuator (TMA)

IOWA DOT	REVISION	
	7	10-17-17
STANDARD ROAD PLAN		TC-233
REVISIONS: Added Circle Note 7.		SHEET 1 of 2
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>		
PAVEMENT MARKING OPERATIONS		
TWO-LANE		



VEHICLES STRADDLING CENTERLINE

- ① Use this sign when painting centerline markings.
- ② Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ③ This arrow board may be operated in a four-corner caution mode.
- ④ Move this vehicle to the shoulder to accommodate passing traffic.
- ⑤ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ⑥ Refer to [SI-881](#) for sign details.
- ⑦ TMA required for speed limits of 55 mph or greater and ADT greater than 3,000.

LEGEND

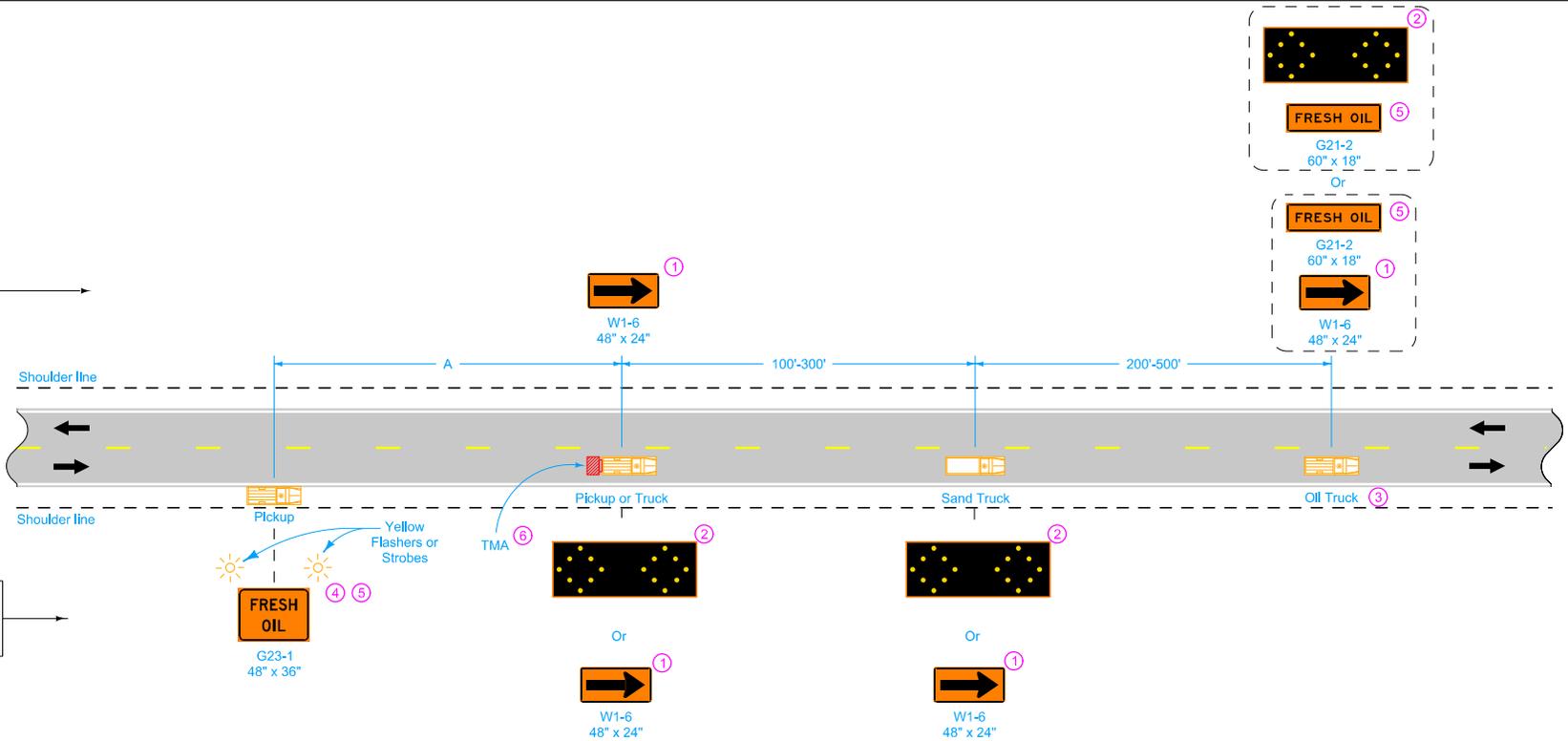
← Direction of Traffic

▣ Truck-Mounted Attenuator (TMA)

IOWA DOT	REVISION	
	7	10-17-17
STANDARD ROAD PLAN		TC-233
<small>REVISIONS: Added Circle Note 7.</small>		<small>SHEET 2 of 2</small>
<i>Brian Smith</i> <small>APPROVED BY DESIGN METHODS ENGINEER</small>		
PAVEMENT MARKING OPERATIONS TWO-LANE		

SIGNS FACING OPPOSING TRAFFIC

SIGNS FACING TRAFFIC APPROACHING FROM THE REAR



VEHICLES NOT STRADDLING CENTERLINE

Equip all vehicles with an amber revolving light or amber strobe light.

- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow display may be operated in a four-corner caution mode.
- ③ Move this vehicle to the shoulder to accommodate passing traffic.
- ④ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ⑤ Refer to [SI-881](#) for sign details.
- ⑥ TMA required for speed limits of 55 mph or greater and ADT greater than 3,000.

Possible Contract Item:
Traffic Control

LEGEND

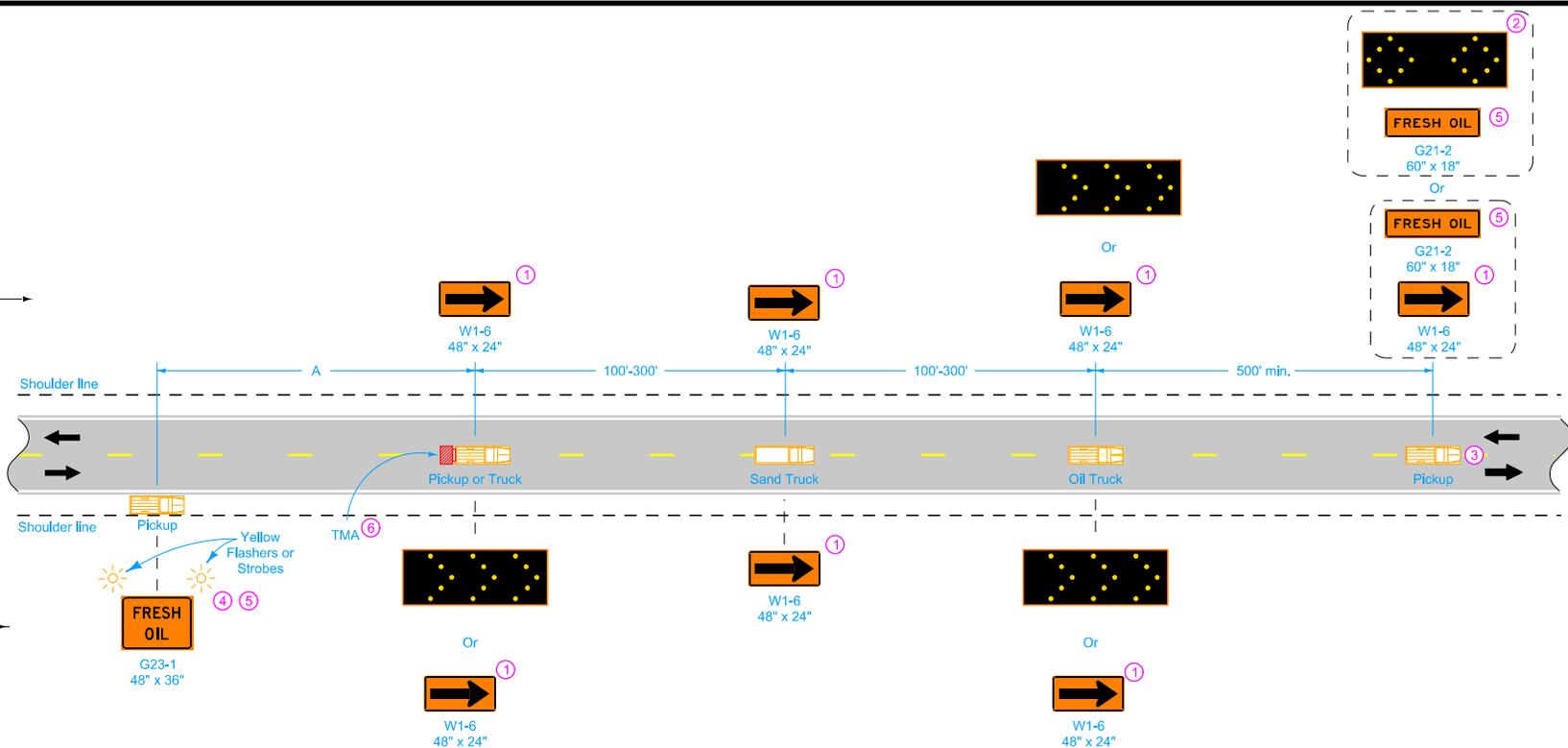
- ← Direction of Traffic
- ▭ Truck-Mounted Attenuator (TMA)

SPEED LIMIT (mph)	A min.
25 or less	200'
30 - 35	300'
40 - 45	500'
50 or greater	1000'

	REVISION
	3 10-17-17
STANDARD ROAD PLAN	TC-234
	SHEET 1 of 2
<small>REVISIONS: Added Circle Note 6.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
STRIP SEALING OPERATIONS	

SIGNS FACING
OPPOSING TRAFFIC

SIGNS FACING TRAFFIC
APPROACHING FROM
THE REAR



VEHICLES STRADDLING CENTERLINE

- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow display may be operated in a four-corner caution mode.
- ③ Move this vehicle to the shoulder to accommodate passing traffic.
- ④ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ⑤ Refer to **SI-881** for sign details.
- ⑥ TMA required for speed limits of 55 mph or greater and ADT greater than 3,000.

LEGEND

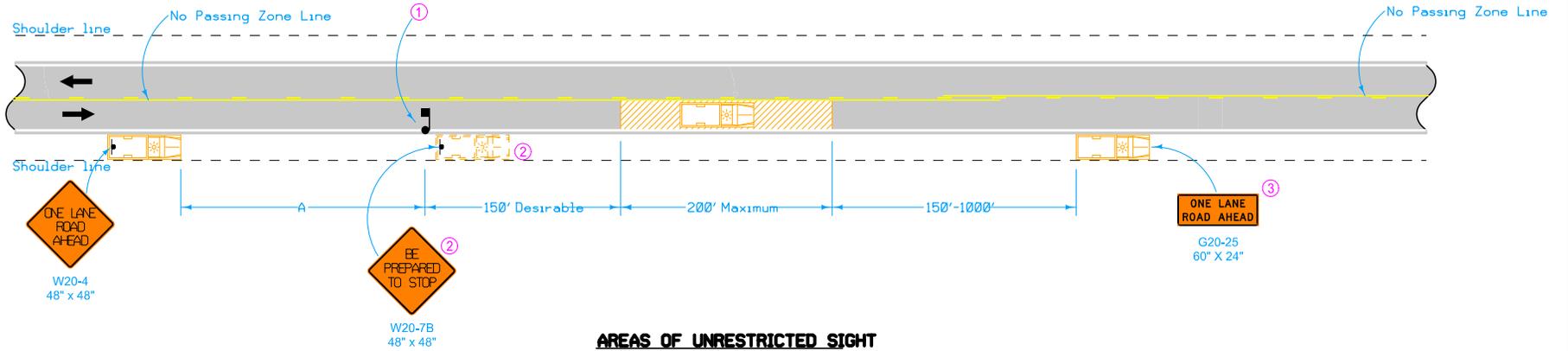
← Direction of Traffic

▭ Truck-Mounted Attenuator (TMA)

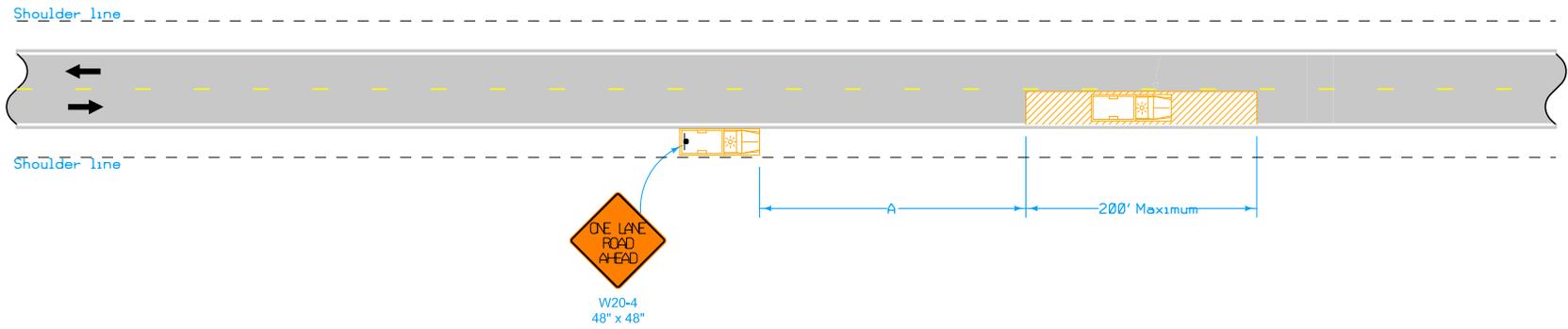
SPEED LIMIT (mph)	A min.
25 or less	200'
30 - 35	300'
40 - 45	500'
50 or greater	1000'

	REVISION
	3 10-17-17
STANDARD ROAD PLAN	TC-234
	SHEET 2 of 2
<small>REVISIONS: Added Circle Note 6.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
STRIP SEALING OPERATIONS	

**AREAS OF RESTRICTED SIGHT
(Typically a 'No-Passing' Zone)**



AREAS OF UNRESTRICTED SIGHT



LEGEND

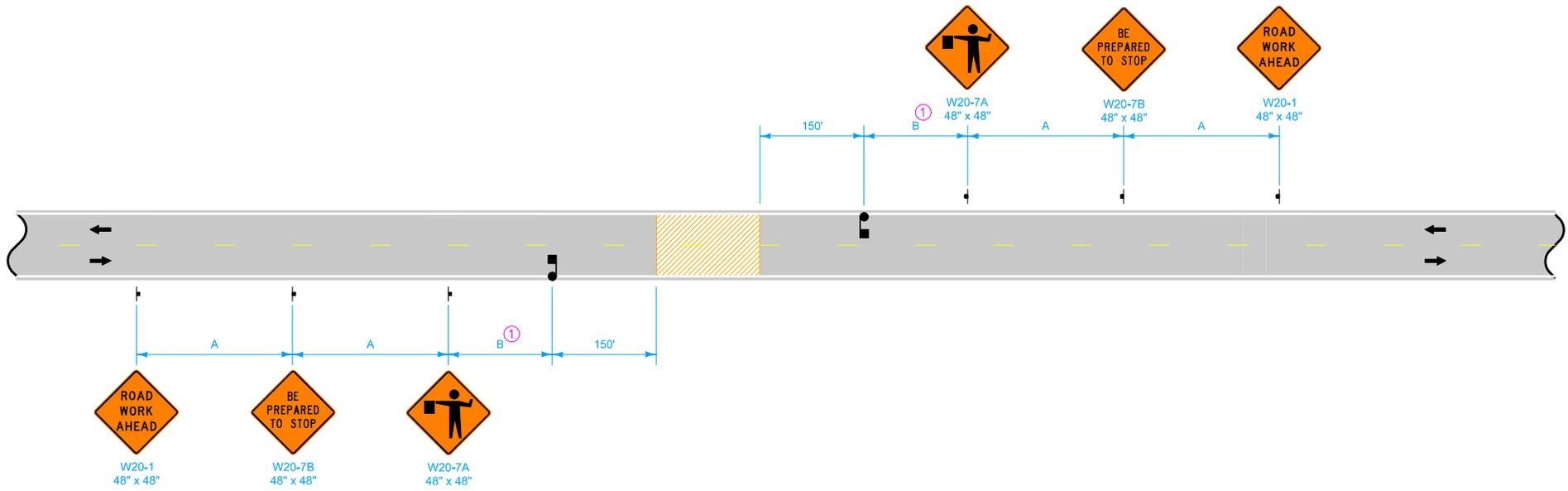
- Direction of Traffic
- Flagger
- Traffic Sign
- Work Area
- Work Vehicle

Speed Limit (mph)	A min.
25 or less	200'
30-35	300'
40-45	500'
50 or greater	1000'

For stops exceeding 15 minutes or in heavy traffic situations, use **TC-213**.
Equip all vehicles with an amber revolving light or an amber strobe light.

- ① When a stop is made in an area of restricted sight distance, use a flagger to hold traffic in the closed lane and allow to pass when conditions are safe.
- ② This vehicle and sign may be used in lieu of a flagger.
- ③ Refer to **SI-881** for sign details.

	REVISION
	1 10-15-19
STANDARD ROAD PLAN	TC-235
REVISIONS: New logo.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
EDGE RUT REPAIR	



LEGEND

- Traffic Sign
- Work Area
- Flagger
- Direction of Traffic

SPEED LIMIT (mph)	A	B ^① (minimum)
35 or less	250'	250'
40 - 45	350'	350'
50 or greater	500'	500'

This layout is intended for a preplanned closure of 20 minutes or less.

^① The Engineer will determine the storage length, B, necessary to accommodate stopped traffic during the closure.

Possible Contract Item:
Traffic Control
Flaggers

	REVISION
	3 10-15-19
STANDARD ROAD PLAN	TC-251
REVISIONS: New logo.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
TEMPORARY ROAD CLOSURE	

SIGN PLACEMENT ON
TYPE III BARRICADES



Typical Sign Placement



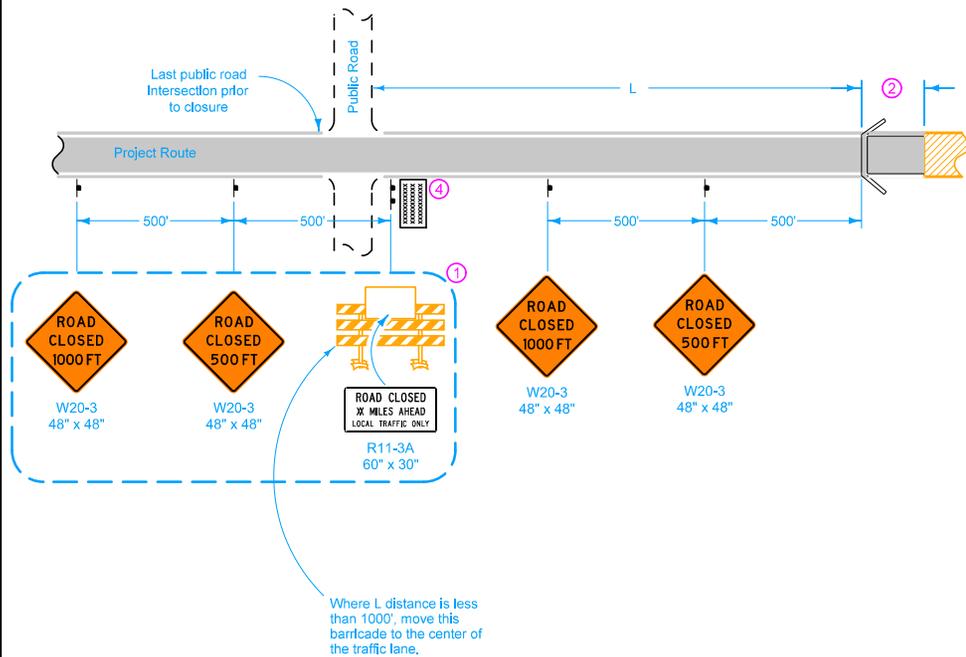
Sign Placement with
Supplemental Sign

Possible Contract Items:
Traffic Control
Safety Closures
Portable Dynamic Message Sign

Possible Tabulation:
108-13A

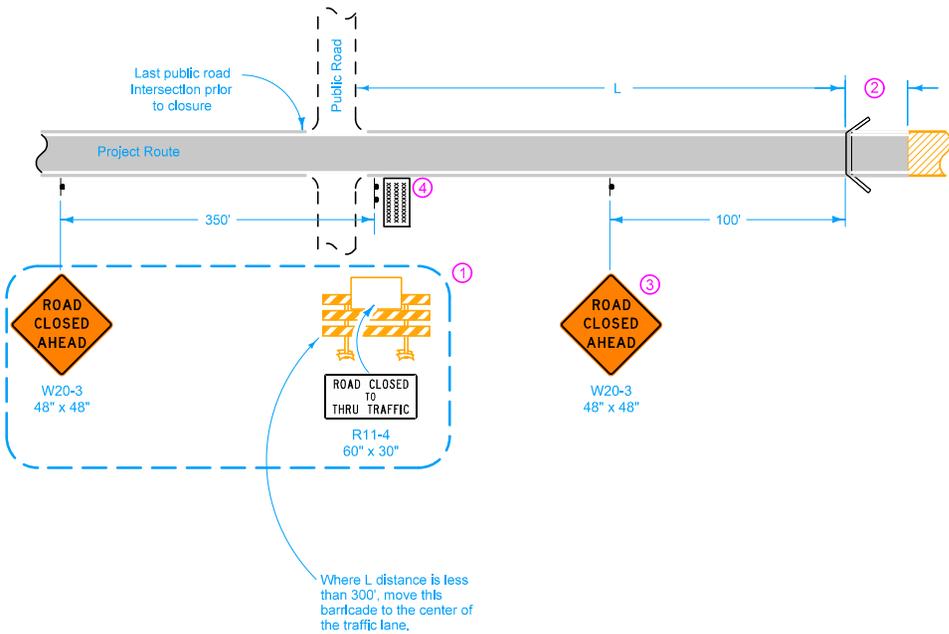
	REVISION
	6 04-21-20
STANDARD ROAD PLAN	TC-252
SHEET 1 of 3	
REVISIONS: Added Portable Dynamic Message Sign and new note 4 on Sheet 2.	
 APPROVED BY DESIGN METHODS ENGINEER	
ROUTES CLOSED TO TRAFFIC	

SITUATION 1 (RURAL)
Project Route Closure



Where L distance is less than 1000', move this barricade to the center of the traffic lane.

SITUATION 1 (URBAN)
Project Route Closure



Where L distance is less than 300', move this barricade to the center of the traffic lane.

LEGEND

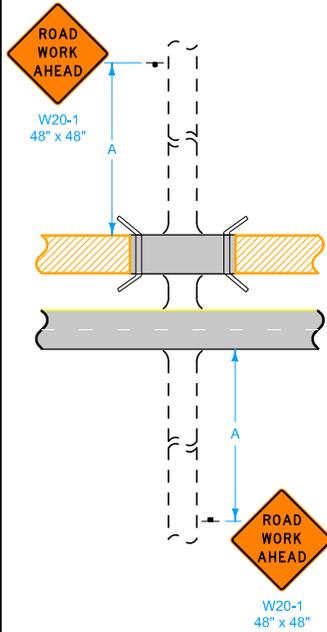
- Traffic Sign
- Type III Barricade
- Portable Dynamic Message Sign
- Work Area
- Road Closure

- ① In situation 1, if the intersection is the point of detour these signs and barricade will become the responsibility of the contracting authority and may be modified by the contracting authority to fit detour signing.
- ② When possible, a 100' buffer is desirable.
- ③ When L is less than 300 feet, omit the ROAD CLOSED AHEAD sign.
- ④ Place for 7 calendar days prior to closure. The Engineer will determine the message to display. Remove when road is closed. Use of Portable Dynamic Message Sign is optional on non-primary roadways.

	REVISION
	6 04-21-20
STANDARD ROAD PLAN	TC-252
	SHEET 2 of 3
<small>REVISIONS: Added Portable Dynamic Message Sign and new note 4 on Sheet 2.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
ROUTES CLOSED TO TRAFFIC	

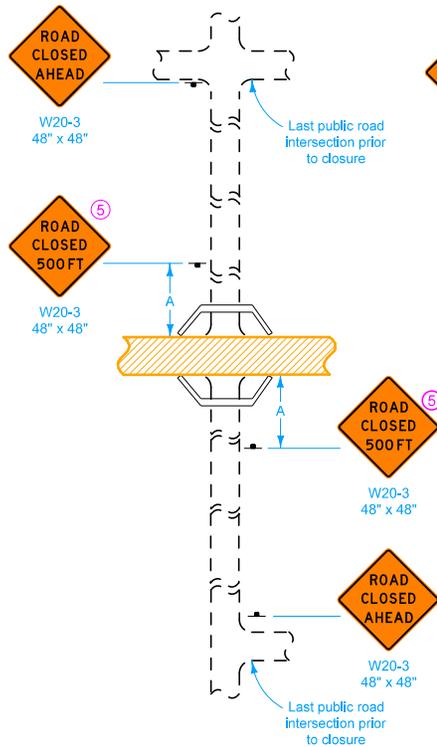
SITUATION 2

Public cross-traffic maintained.
No access to project.



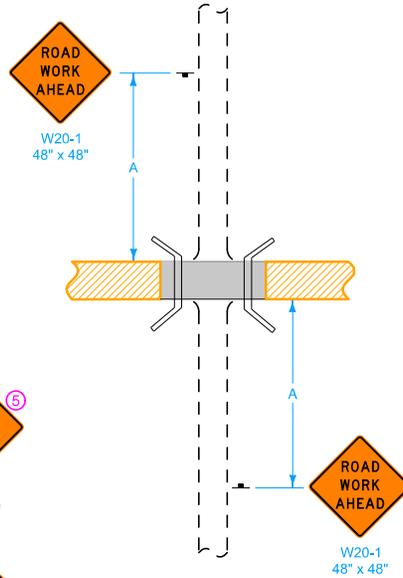
SITUATION 3

No access to project
(Applicable to T-Intersections)



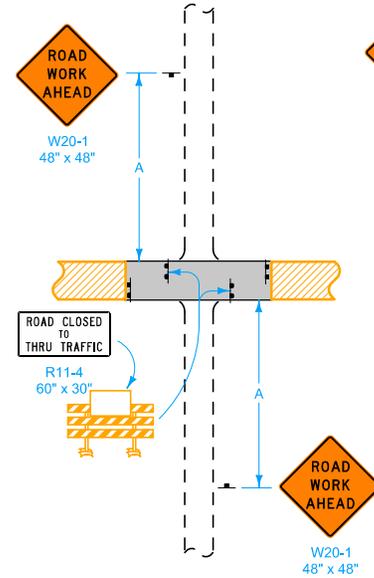
SITUATION 4

Public cross-traffic maintained.
No access to project.



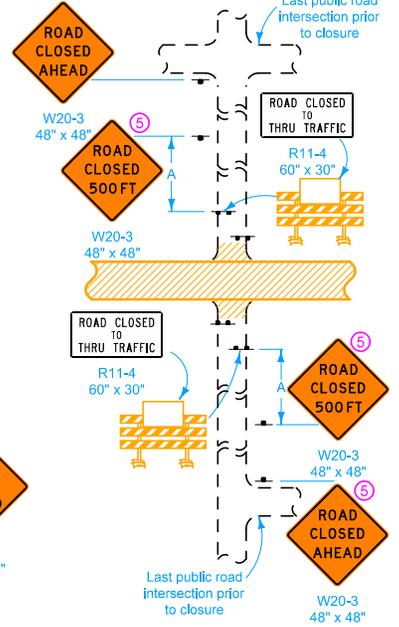
SITUATION 5

Public cross-traffic maintained.
Contractor and resident access.



SITUATION 6

No public access. Contractor and resident
access only. (Applicable to T-Intersections)



LEGEND

- Traffic Sign
- Type III Barricade
- Work Area
- Road Closure

Location	A
Urban	200'
Rural	500'

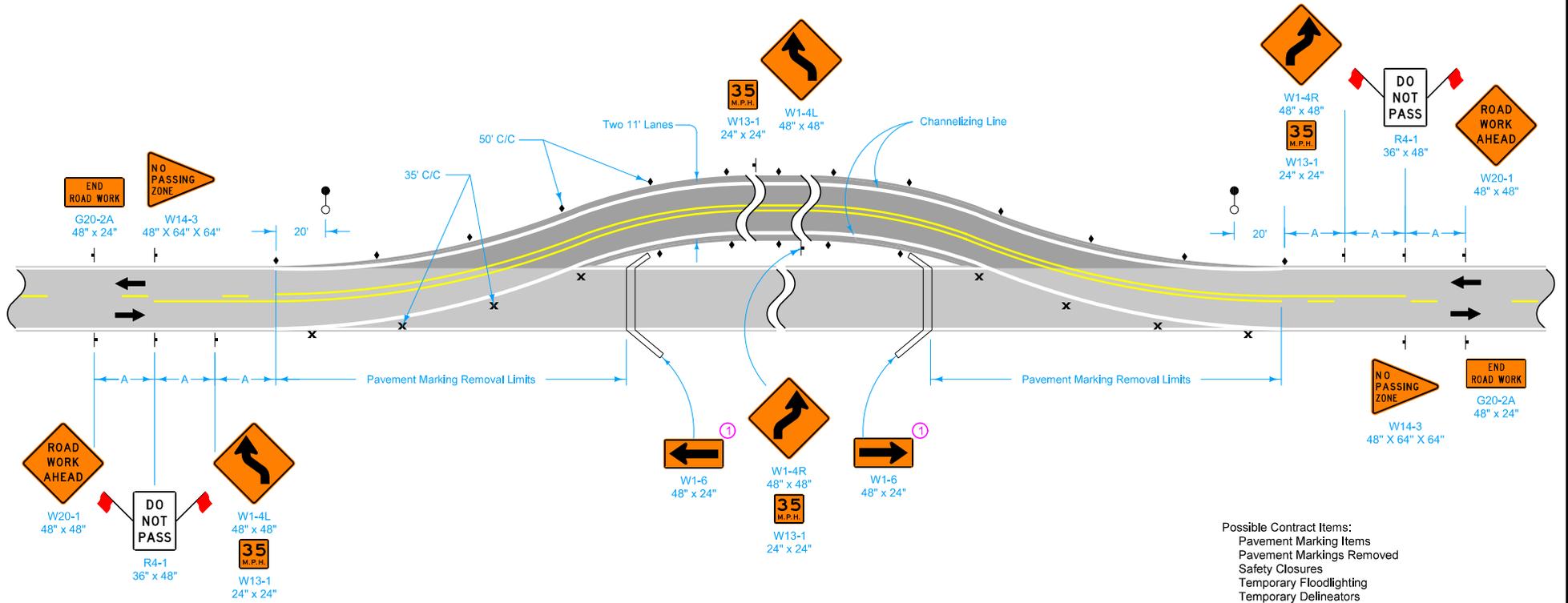
During suspension of work, (such as over winter):

- Use Situation 2 on two-lane to four-lane projects.
- Situation 5 is preferred where cross-traffic is maintained.

⑤ When the distance between the last public road intersection and the ROAD CLOSED or ROAD CLOSED TO THRU TRAFFIC barricade is less than 1,000 feet, omit the ROAD CLOSED 500 FT sign.

 STANDARD ROAD PLAN	REVISION 6 04-21-20
	TC-252
	SHEET 3 of 3
REVISIONS: Added Portable Dynamic Message Sign and new note 4 on Sheet 2.	
 APPROVED BY DESIGN METHODS ENGINEER	
ROUTES CLOSED TO TRAFFIC	

TWO-LANE DETOUR



LEGEND

- ← Direction of Traffic
- x Drum
- ◆ Single White Delineators (mount back to back)
- ⎓ Road Closure
- Temporary Floodlighting
- ⊥ Traffic Sign

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

The Engineer may change the advisory speed. If reduced below 35 mph, the Reverse Curve signs (W1-4L and W1-4R) change to Reverse Turn signs (W1-3La and W1-3Ra).

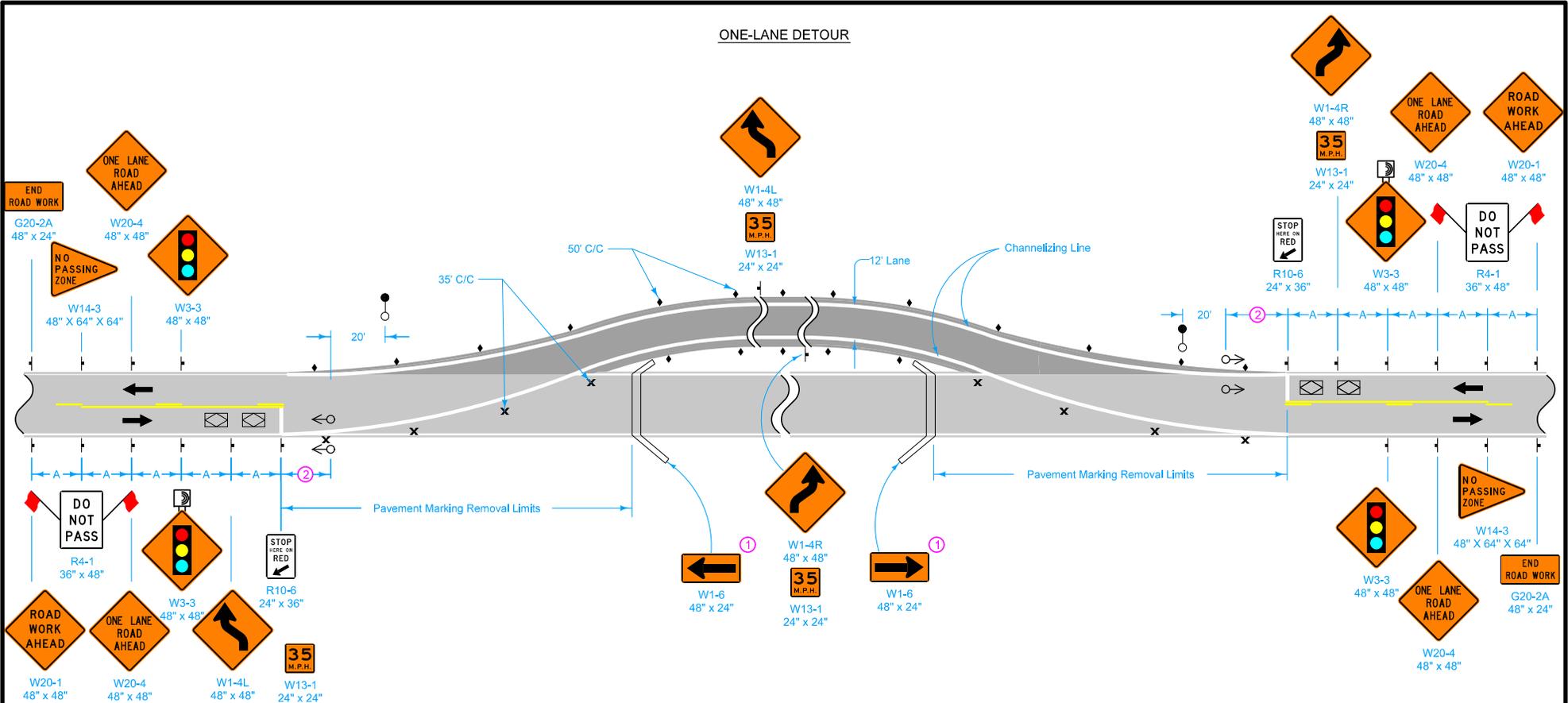
① Add below ROAD CLOSED (R11-2) sign already included in Safety Closure.

- Possible Contract Items:
- Pavement Marking Items
 - Pavement Markings Removed
 - Safety Closures
 - Temporary Floodlighting
 - Temporary Delineators
 - Temporary Traffic Signal
 - Traffic Control

- Possible Tabulations:
- 108-13A
 - 108-22
 - 108-27
 - 108-28

IOWA DOT	REVISION	
	10	10-18-16
STANDARD ROAD PLAN		TC-253
REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".		SHEET 1 of 2
<i>Brian Smith</i>		
APPROVED BY DESIGN METHODS ENGINEER		
PAVED ON-SITE DETOUR		

ONE-LANE DETOUR



LEGEND

- Direction of Traffic
- Drum
- Single White Delineators (mount back to back)
- Road Closure
- Temporary Floodlighting
- Temporary Traffic Signal
- Traffic Sign
- Type 'B' High-Intensity Flashing Warning Light
- Vehicle Detection Area

TIMING FOR ACTUATED SIGNALS

Recommended Settings, secs.

Initial = 12.0
 Extension = 2.5
 Maximum Green = 45.0
 Yellow = 3.0
 All Red = (see table)

Distance Between Stop Lines	All Red (secs.)*	Distance Between Stop Lines	All Red (secs.)*
400'	10	900'	21
500'	12	1000'	23
600'	14	1100'	25
700'	16	1200'	28
800'	19	1300'	30

* Range of values are based on an operating speed of 30 mph

- ① Add below ROAD CLOSED (R11-2) sign already included in Safety Closure.
- ② Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

IOWA DOT

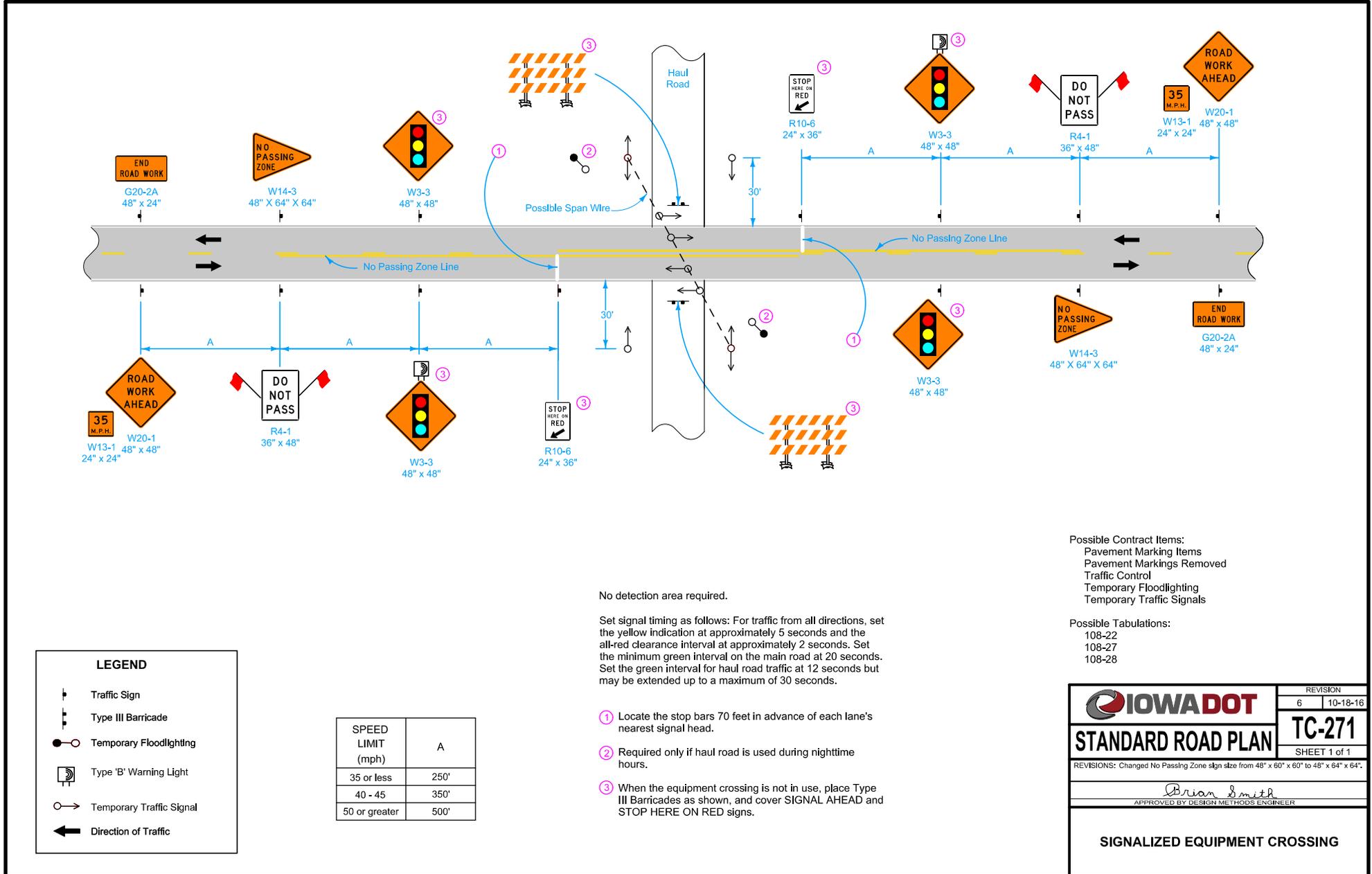
STANDARD ROAD PLAN

REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".

REVISION	10	10-18-16
TC-253		
SHEET 2 of 2		

Brian Smith
 APPROVED BY DESIGN METHODS ENGINEER

PAVED ON-SITE DETOUR



LEGEND

- Traffic Sign
- Type III Barricade
- Temporary Floodlighting
- Type 'B' Warning Light
- Temporary Traffic Signal
- Direction of Traffic

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

No detection area required.

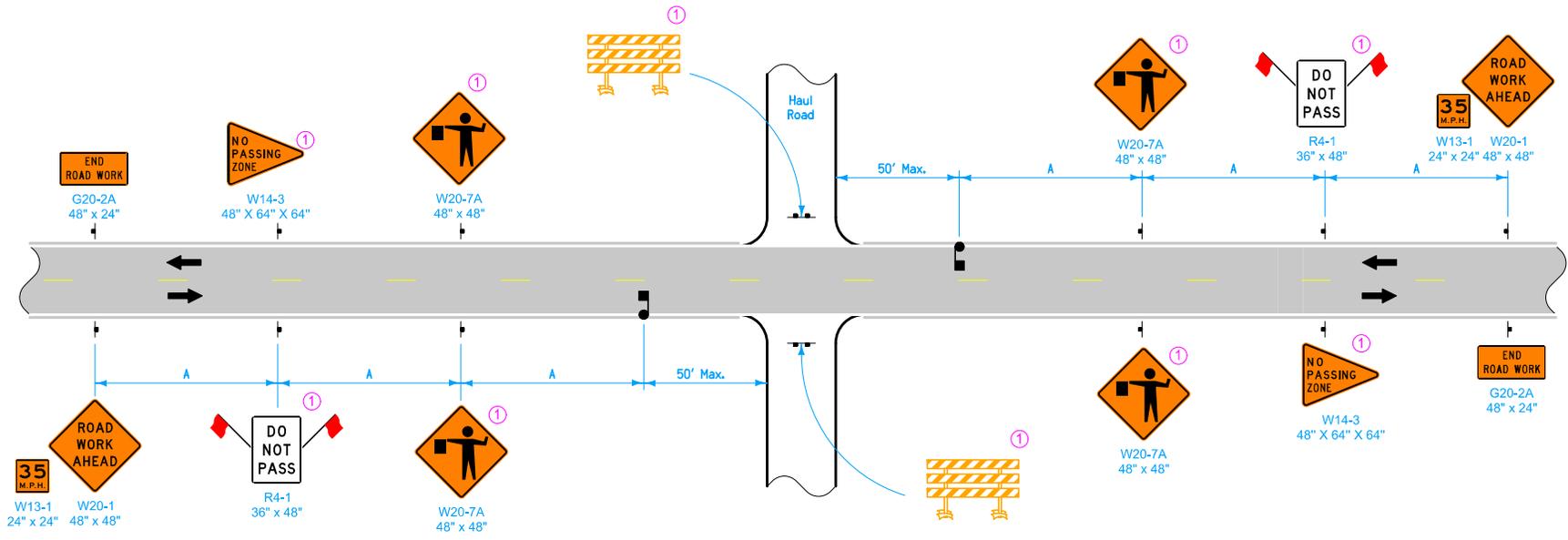
Set signal timing as follows: For traffic from all directions, set the yellow indication at approximately 5 seconds and the all-red clearance interval at approximately 2 seconds. Set the minimum green interval on the main road at 20 seconds. Set the green interval for haul road traffic at 12 seconds but may be extended up to a maximum of 30 seconds.

- ① Locate the stop bars 70 feet in advance of each lane's nearest signal head.
- ② Required only if haul road is used during nighttime hours.
- ③ When the equipment crossing is not in use, place Type III Barricades as shown, and cover SIGNAL AHEAD and STOP HERE ON RED signs.

Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Traffic Control
 Temporary Floodlighting
 Temporary Traffic Signals

Possible Tabulations:
 108-22
 108-27
 108-28

	REVISION	
	6	10-18-16
STANDARD ROAD PLAN	TC-271	
SHEET 1 of 1		
REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64".		
<i>Brian Smith</i> APPROVED BY DESIGN METHODS ENGINEER		
SIGNALIZED EQUIPMENT CROSSING		



Possible Contract Items:
 Traffic Control
 Flaggers

① During nighttime hours or when the haul road is not in use, Type III Barricades shall be placed as shown and DO NOT PASS, NO PASSING ZONE and Flagger Symbol signs shall be covered or removed.

LEGEND

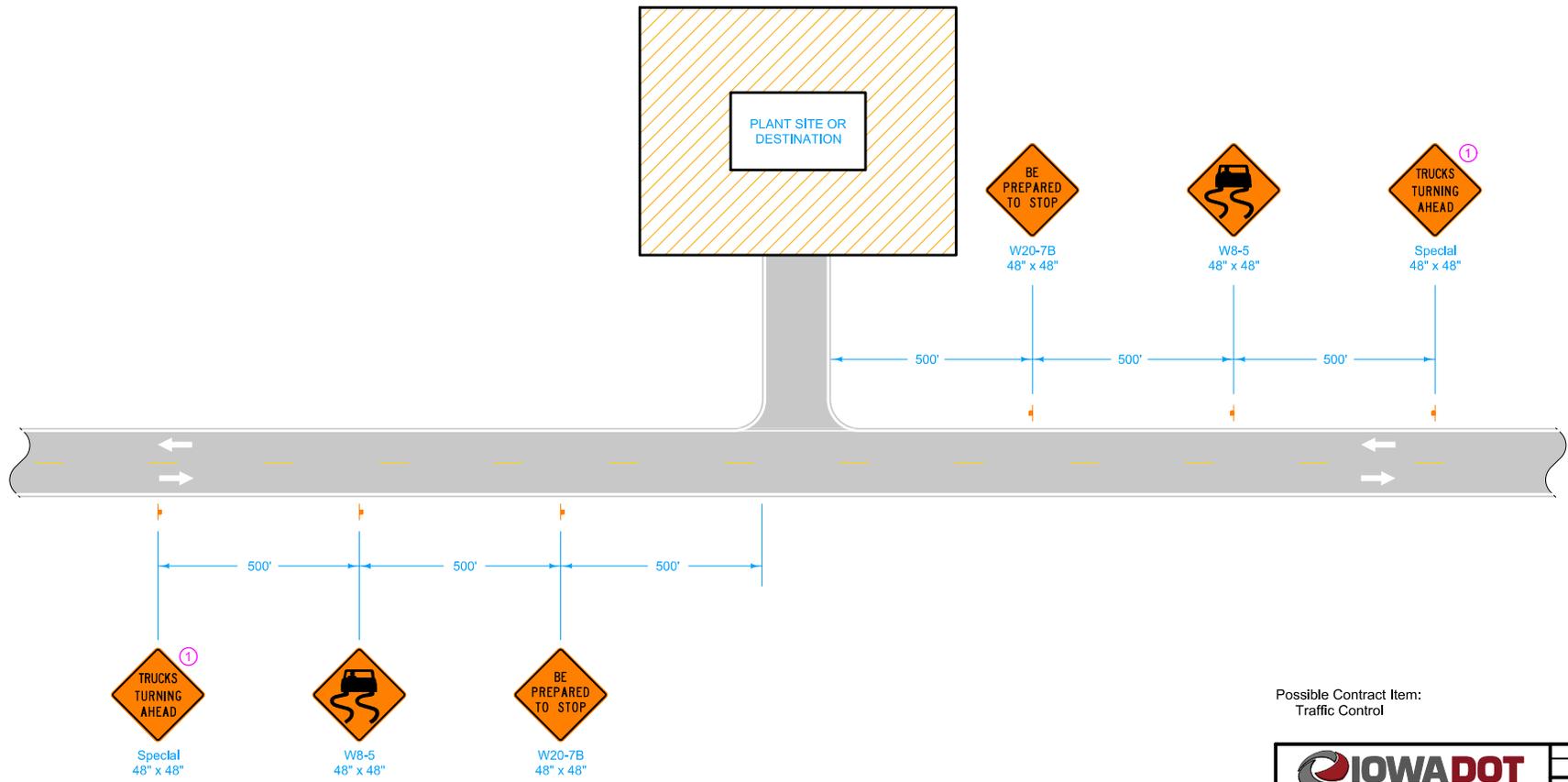
- Traffic Sign
- Type III Barricade
- Flagger
- Direction of Traffic

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	350'
50 or greater	500'

	REVISION
	3 10-18-16
	STANDARD ROAD PLAN
TC-272	
SHEET 1 of 1	
REVISIONS: Changed No Passing Zone sign size from 48" x 60" x 60" to 48" x 64" x 64". Replaced old DOT logo with new DOT logo.	
APPROVED BY DESIGN METHODS ENGINEER	
UNSIGNALIZED EQUIPMENT CROSSING	

Construction traffic shall yield the right-of-way to mainline traffic.

① Refer to SI-881 for details.



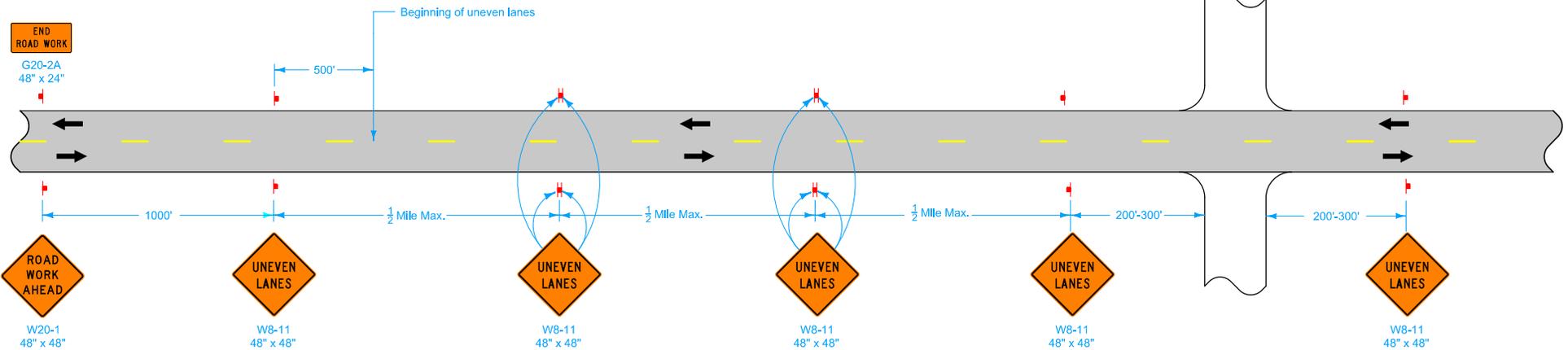
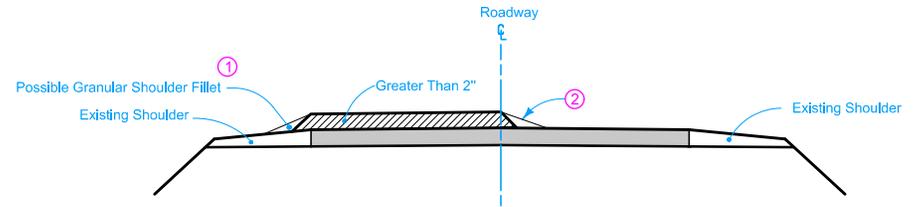
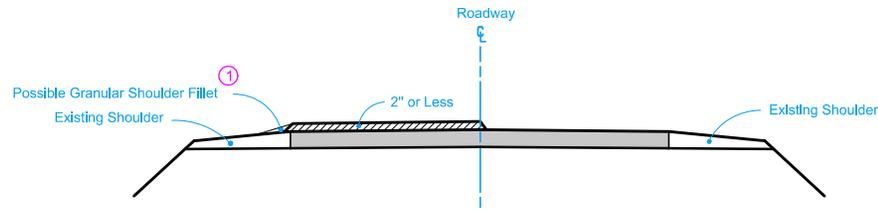
LEGEND	
	Traffic Sign
	Direction of Traffic

Possible Contract Item:
Traffic Control

	REVISION
	2 10-15-19
STANDARD ROAD PLAN	TC-273
REVISIONS: New logo.	SHEET 1 of 1
APPROVED BY DESIGN METHODS ENGINEER	
CONSTRUCTION SITE ENTRANCE	

DESIGN LIFT THICKNESSES 2" OR LESS

DESIGN LIFT THICKNESSES GREATER THAN 2" (WITH ϕ FILLET)



LEGEND

← Direction of Traffic

† Traffic Sign

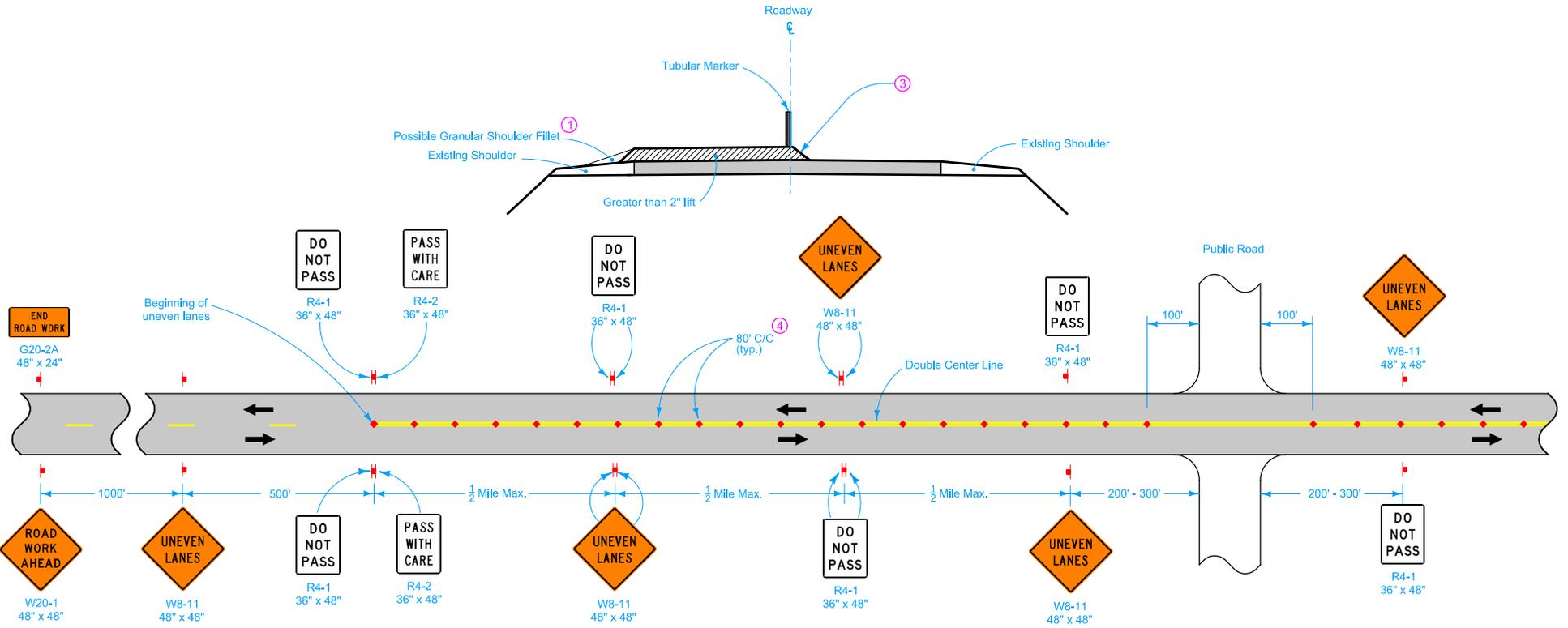
- ① Shoulder Fillet: Refer to Section 1107 of the Standard Specifications and Safety Edge specifications.
- ② Centerline fillet may be notched wedge, Safety Edge, or a temporary 3:1 HMA fillet.

Possible Contract Items:
 Pavement Marking Items
 Traffic Control

Possible Tabulation:
 108-22

IOWA DOT	REVISION	
	4	10-15-19
STANDARD ROAD PLAN		TC-282
REVISIONS: New logo.		SHEET 1 of 3
 APPROVED BY DESIGN METHODS ENGINEER		
UNEVEN LANES		

DESIGN LIFT THICKNESSES GREATER THAN 2" (WITHOUT ϕ FILLET)



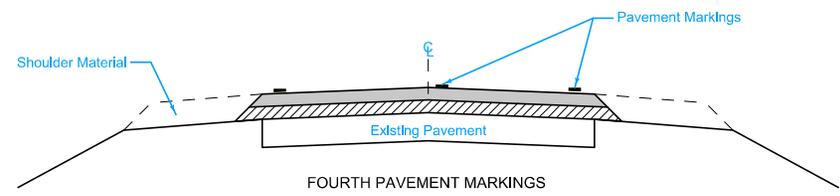
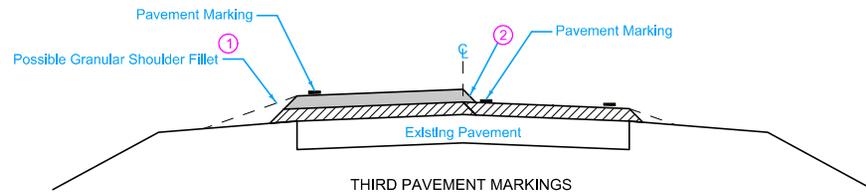
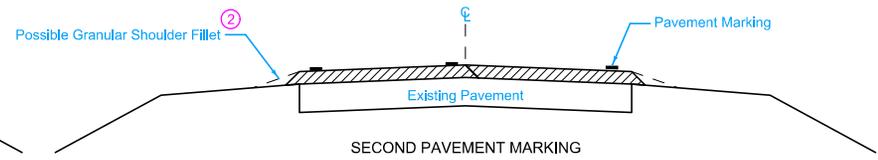
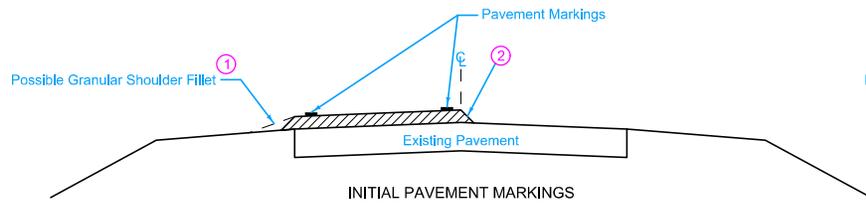
"No-Passing" zones shall not exceed 2.5 miles for ADT less than 2500 vpd or 2.0 miles for ADT from 2500 to 5000 vpd.

- ① Shoulder Fillet: Refer to Section 1107 of the Standard Specifications and Safety Edge specifications.
- ③ Typical 1:1 taper.
- ④ Spacing = 40 feet where horizontal curve radius is less than 1000 feet.

LEGEND

- ← Direction of Traffic
- ↑ Traffic Sign
- ♦ Tubular Marker

 STANDARD ROAD PLAN	REVISION 4 10-15-19
	TC-282 SHEET 2 of 3
REVISIONS: New logo.	
 APPROVED BY DESIGN METHODS ENGINEER	
UNEVEN LANES	

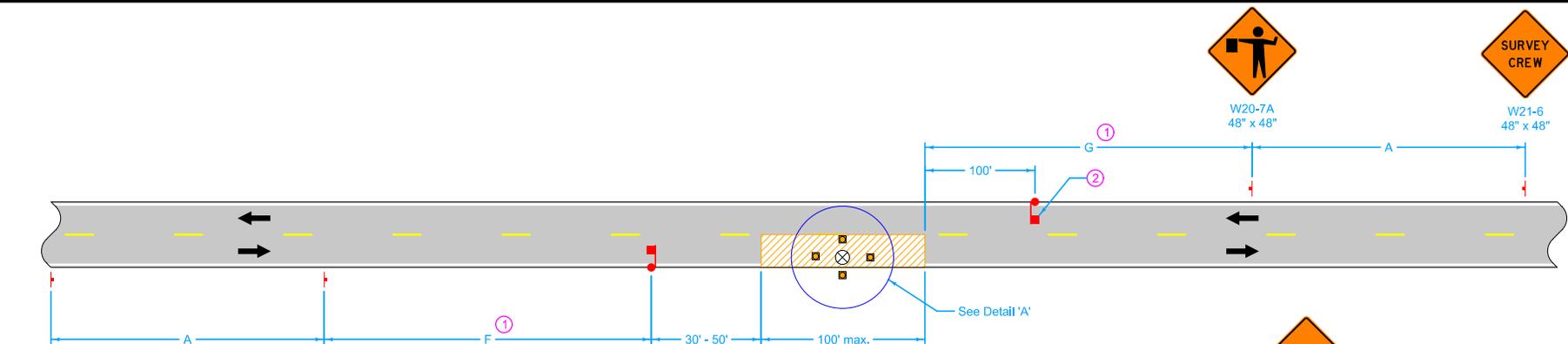


PAVEMENT MARKING SEQUENCE

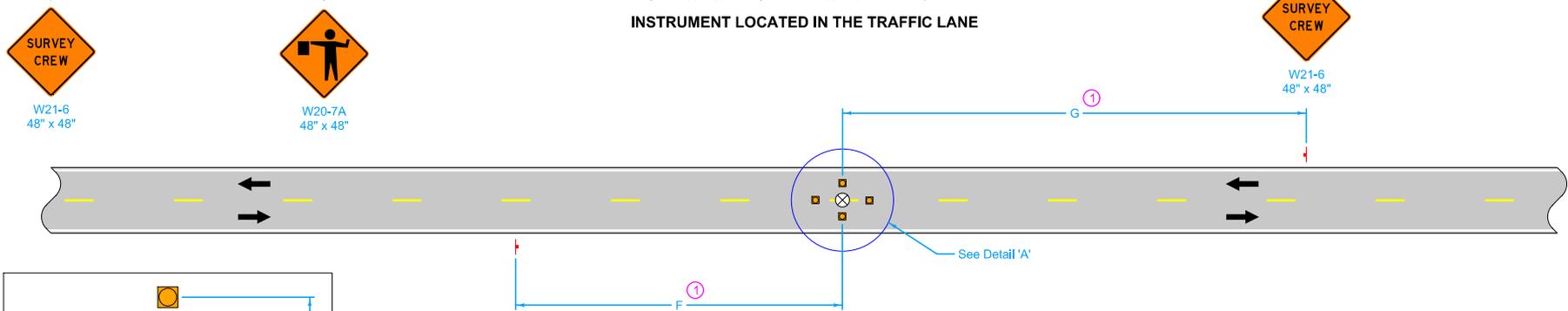
- ① Shoulder Fillet: Refer to Standard Specification 1107 and Safety Edge specifications.
- ② Centerline fillet may be notched wedge, Safety Edge, or a temporary 3:1 HMA fillet.

LEGEND	
	Surface Course
	Intermediate Course

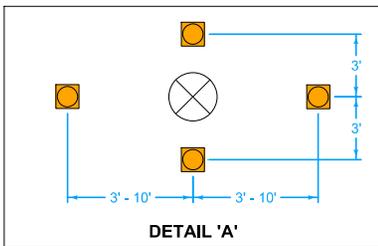
IOWA DOT	REVISION	
	4	10-15-19
STANDARD ROAD PLAN		TC-282
REVISIONS: New logo.		SHEET 3 of 3
 APPROVED BY DESIGN METHODS ENGINEER		
UNEVEN LANES		



INSTRUMENT LOCATED IN THE TRAFFIC LANE



INSTRUMENT LOCATED NEAR THE CENTERLINE



DETAIL 'A'

LEGEND

- Traffic Sign
- Instrument Person
- Cone
- Work Area
- Flagger
- Direction of Traffic

SPEED LIMIT (mph)	A	WITH LANE CLOSURE	WITHOUT LANE CLOSURE	F + G MAXIMUM
		F and G ①	F and G ①	
35 or less	250'	250' - 3250'	500' - 3000'	3500'
40 - 45	350'	350' - 3350'	700' - 3000'	3700'
50 or greater	500'	500' - 3500'	1000' - 3000'	4000'

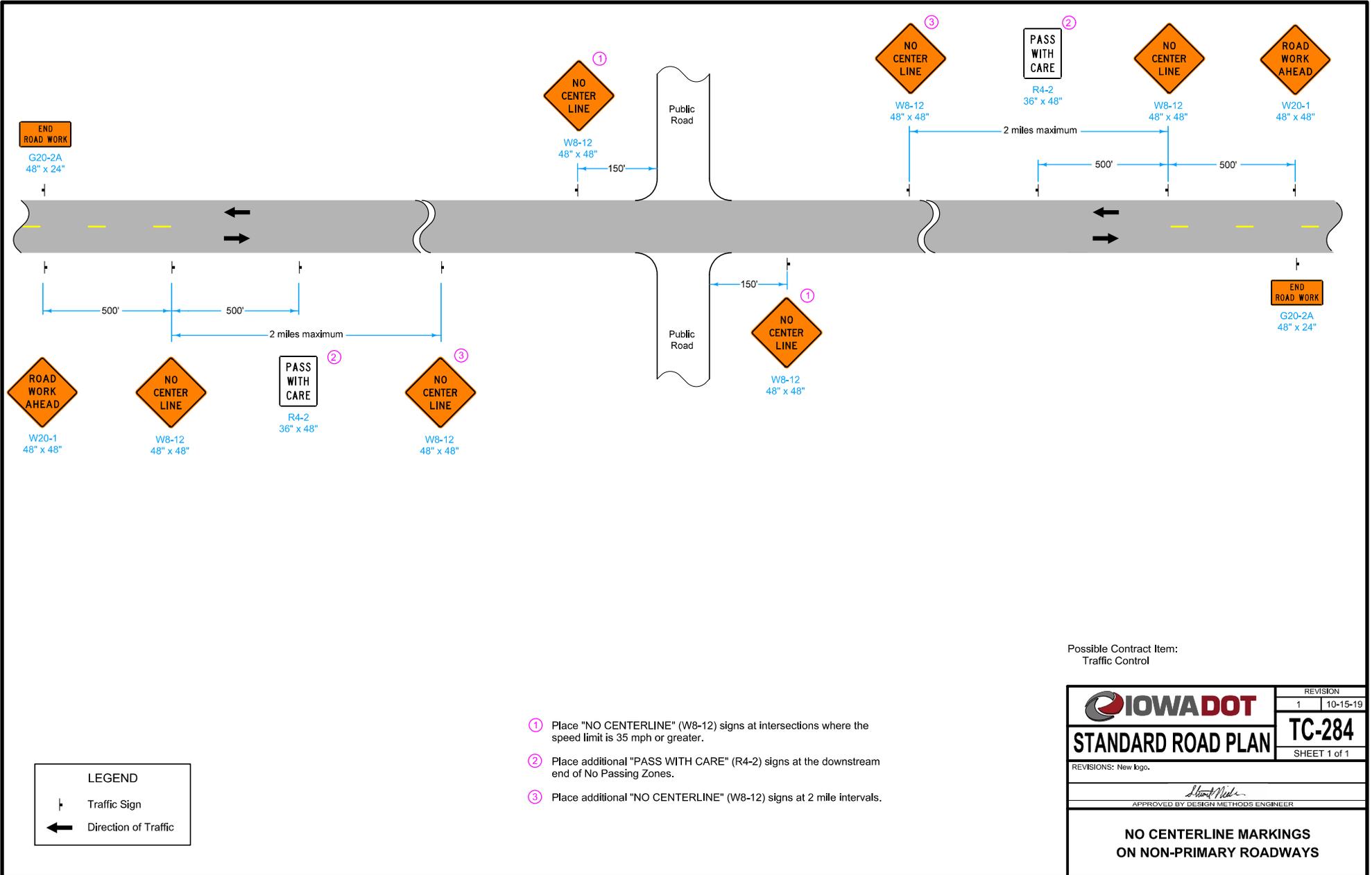
When another person is required outside of the signing setup (e.g. for a survey target), a separate signing setup may be necessary unless the traffic lane can be vacated to accommodate traffic.

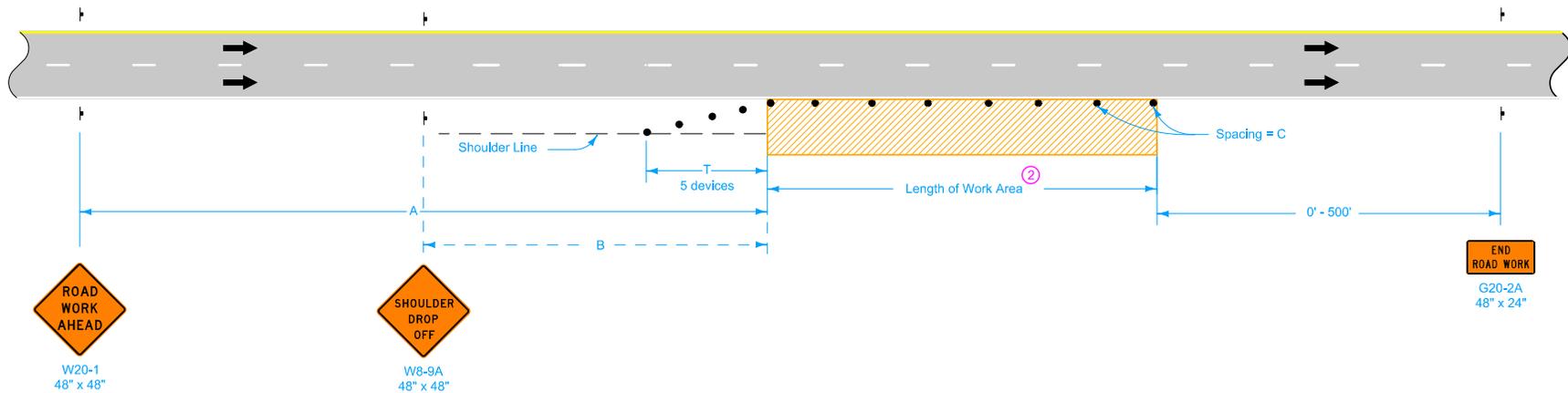
- ① Keep F and G distances as near to minimum values as work permits. However, to be able to move the work area without moving the advance signing, F and G values may be varied within the limits of the table. Maximum movement can be achieved by setting one F or G value at the minimum and the other value at its maximum.
- ② Use a second flagger if:
 - The flagger's view of approaching traffic in the open lane is less than a quarter mile or the work site is in an area of restricted sight distance (such as a "No-Passing" zone); or
 - Excessive traffic delays are encountered.

Possible Contract Items:
 Flaggers
 Traffic Control

IOWA DOT	REVISION
	3 10-15-19
STANDARD ROAD PLAN	TC-283
REVISIONS: New Isgo.	SHEET 1 of 1
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
SURVEYING OPERATIONS	

DO NOT USE ON PRIMARY ROADWAYS





When a pavement edge drop-off exists, install a SHOULDER DROP-OFF sign.

No pavement edge drop-offs greater than pavement depth will be allowed during non-working hours.

Shoulder edge drop-offs shall be mitigated according to Article 1107.08.L2 of the Standard Specifications.

For work lasting less than one hour, refer to TC-1.

Possible Contract Item:
Traffic Control

LEGEND

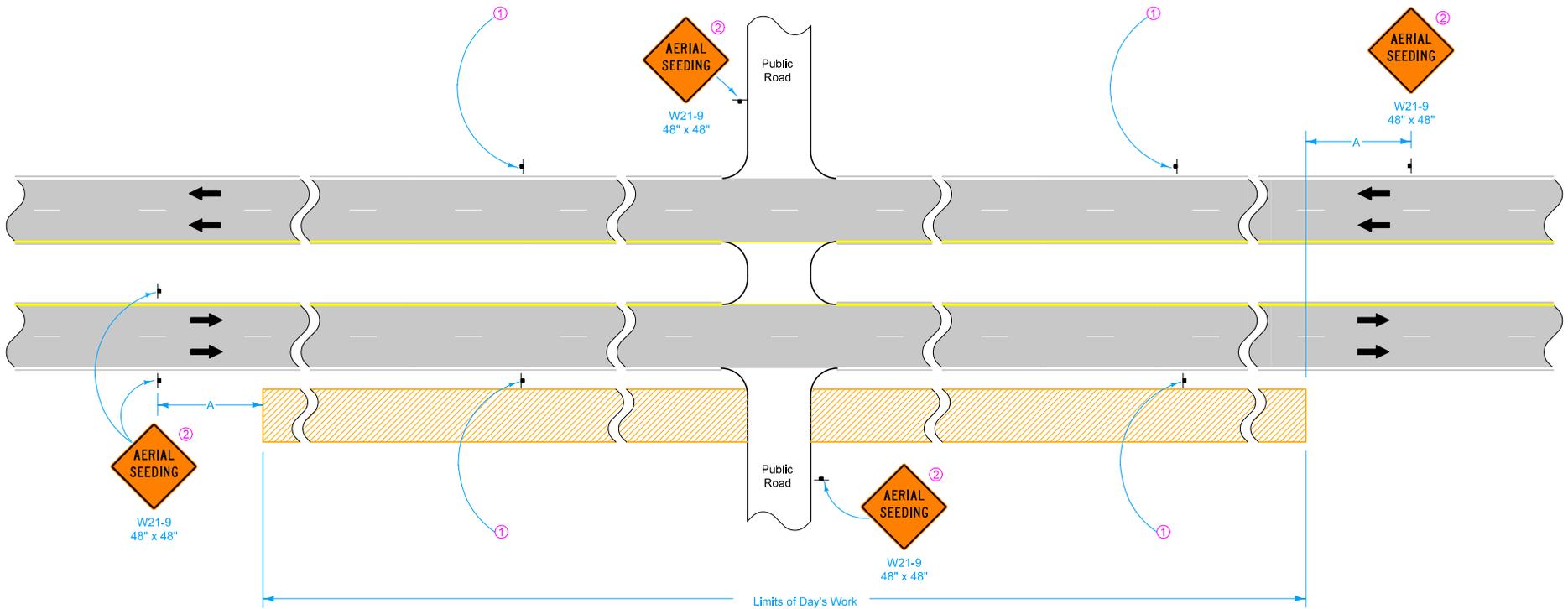
- † Traffic Sign
- 42" Channelizer
- Work Area
- ← Direction of Traffic

SPEED LIMIT (mph)	A	B	C ^②	T
40 or less	500'	250'	40'	100'
45 - 50	700'	350'	80' ^①	200'
55 - 60	1500'	500'	100' ^①	200'
65 - 70	1500'	500'	100' ^①	230'

^① When the length of a pavement edge drop-off is 1000 feet or less, the temporary fillet requirement of Article 1107.08 of the Standard Specifications does not apply. Reduce channelizer spacing to 40 feet.

^② For work areas less than 200 feet long, use channelizers spaced at 20 foot centers or use a vehicle with an amber revolving light or amber strobe light.

 STANDARD ROAD PLAN	REVISION 8 04-21-15
	TC-402
	SHEET 1 of 1
REVISIONS: Modified general notes, changed title and replaced the DOT logo in the title block with the new version.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
WORK WITHIN 15 FT OF TRAVELED WAY	



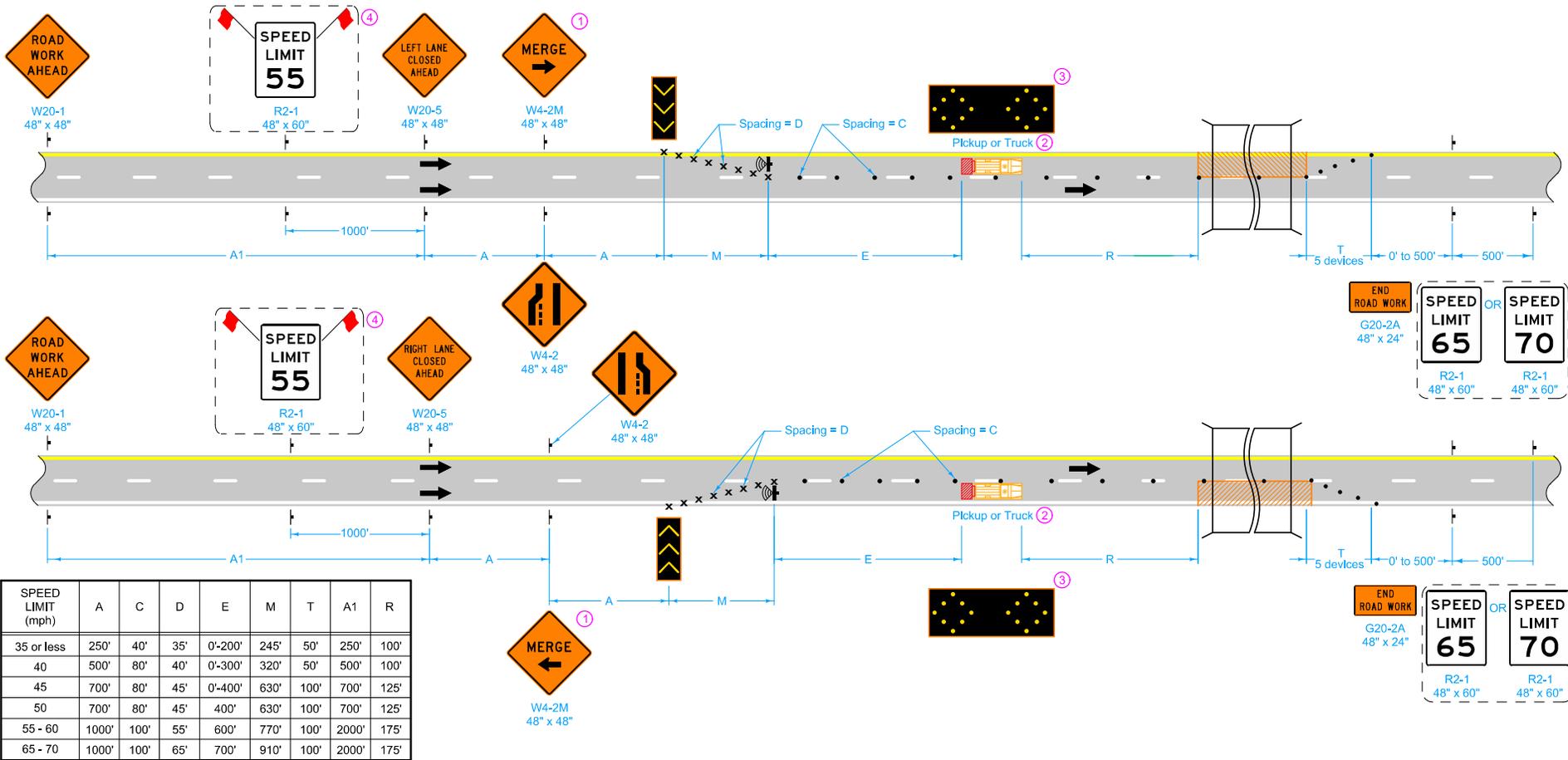
- ① Place AERIAL SEEDING signs along the mainline at a maximum spacing of 3 miles.
- ② Refer to SI-881 for sign details.

Possible Contract Item:
Traffic Control

LEGEND	
	Traffic Sign
	Work Area
	Direction of Traffic

SPEED LIMIT (mph)	A
35 or less	250'
40 - 45	500'
50 or greater	500'

	REVISION
	4 10-15-19
STANDARD ROAD PLAN	TC-403
REVISIONS: New logo.	SHEET 1 of 1
APPROVED BY DESIGN METHODS ENGINEER	
AERIAL SEEDING OPERATIONS	



LEGEND

- Direction Of Traffic
- Traffic Sign
- Drum
- 42" Channelizer
- Truck-Mounted Attenuator (TMA)
- Speed Feedback Sign
- Arrow Board
- Work Area

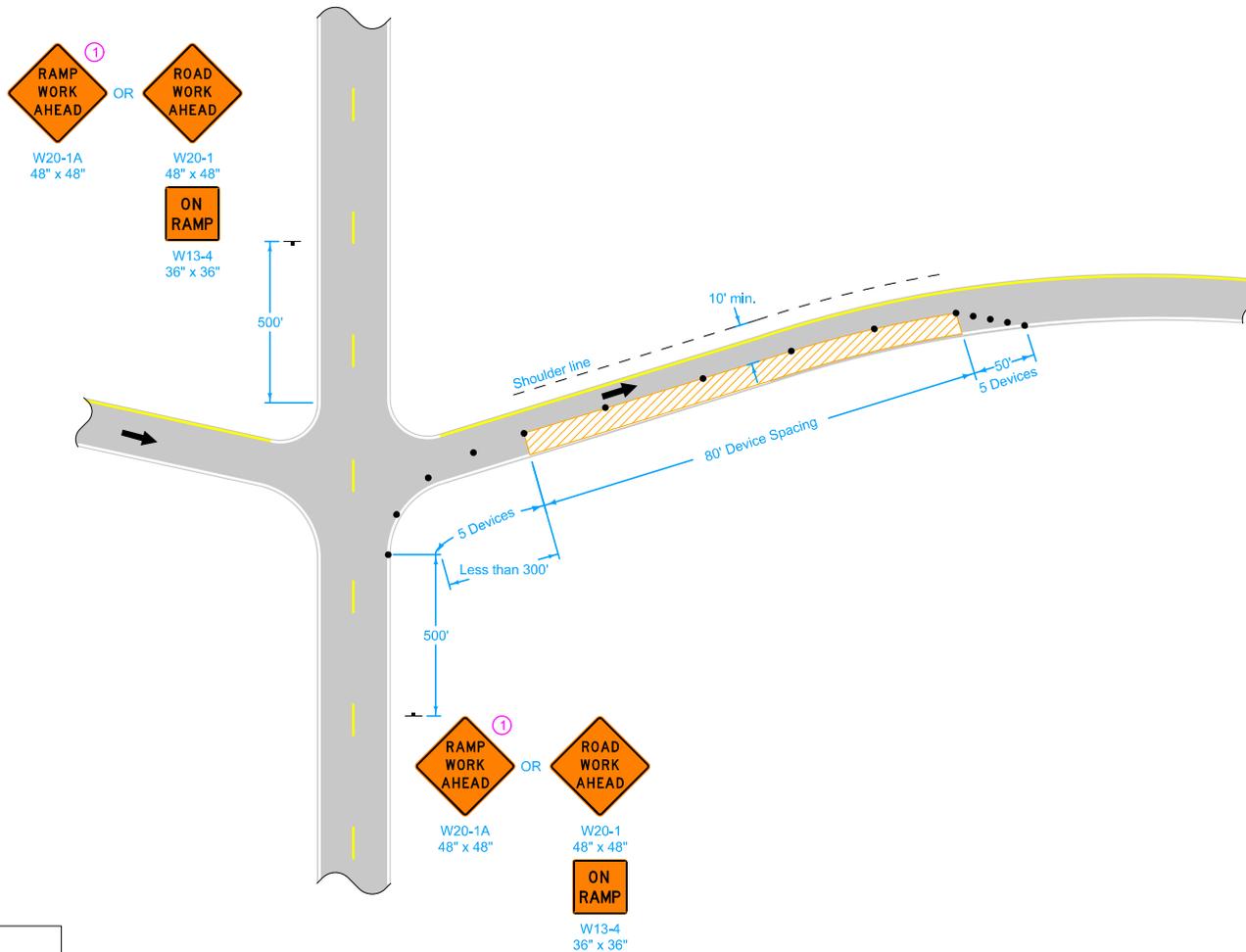
When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signing, place RIGHT/LEFT LANE CLOSED 4 MILES and RIGHT/LEFT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, respectively, as appropriate.

- ① Refer to SI-881 for sign details.
- ② Equip all vehicles with an amber revolving light or amber strobe light.
- ③ This arrow board may be operated in a four-corner caution mode.
- ④ For roadways with a posted speed limit of 60 mph or greater before road work:
 - Place SPEED LIMIT 55 signs prior to the lane closure as shown.
 - Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect.
 - For traffic control zones lasting more than 4 hours, a Speed Feedback Sign may be placed at the end of the merge taper.

Possible Contract Item:
Traffic Control

IOWA DOT	REVISION
	New 4-21-20
STANDARD ROAD PLAN	TC-415
REVISIONS: New.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
SHORT TERM LANE CLOSURE WITH TMA	

① Refer to SI-881 for sign details.

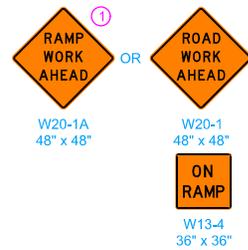
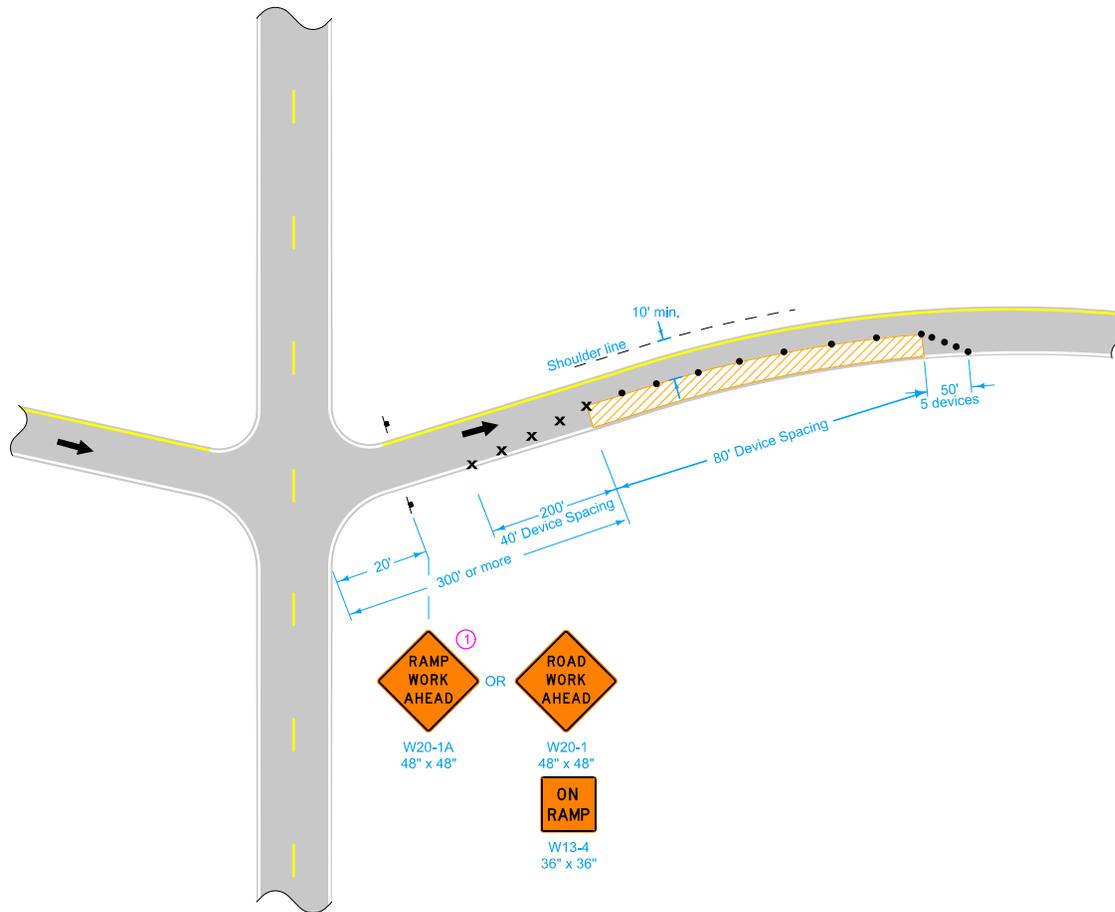


LEGEND	
	Traffic Sign
	42" Channellizer
	Direction of Traffic
	Work Area

Possible Contract Item:
Traffic Control

	REVISION	
	3	10-15-19
STANDARD ROAD PLAN	TC-416	
	SHEET 1 of 4	
REVISIONS: New logo.		
APPROVED BY DESIGN METHODS ENGINEER		
PARTIAL LANE CLOSURE ON RAMPS		

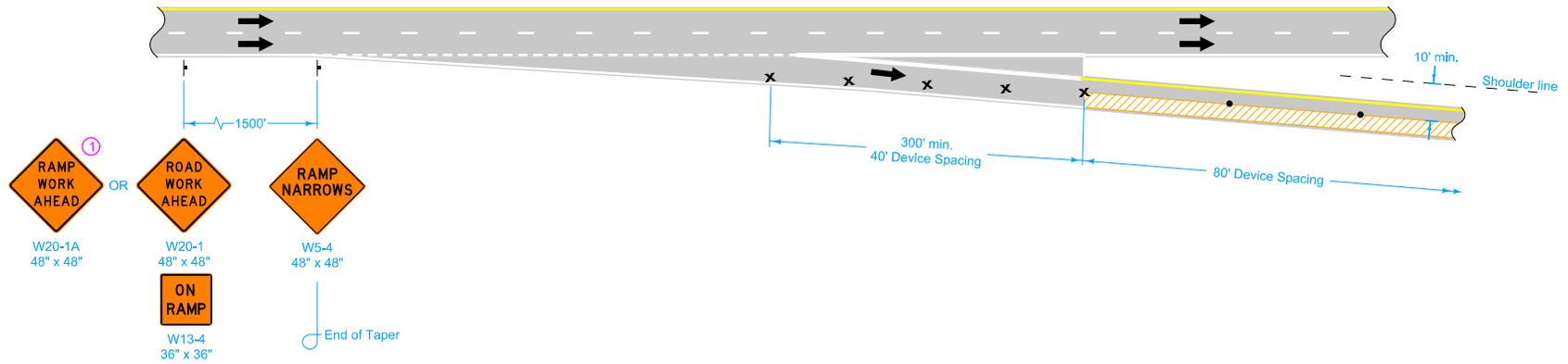
① Refer to SI-881 for sign details.



LEGEND	
x	Drum
†	Traffic Sign
•	42" Channellizer
←	Direction of Traffic
	Work Area

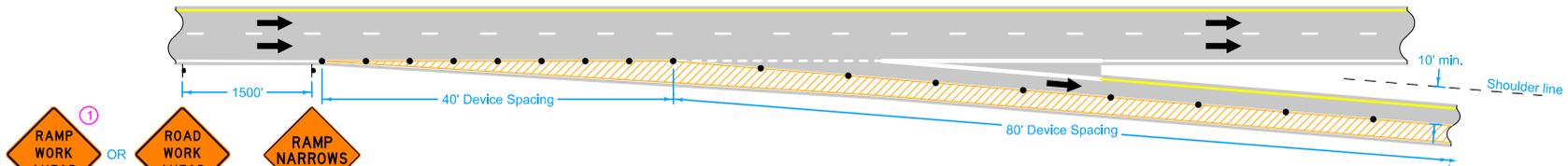
	REVISION	
	3	10-15-19
STANDARD ROAD PLAN	TC-416	
	SHEET 2 of 4	
REVISIONS: New logo.		
APPROVED BY DESIGN METHODS ENGINEER		
<p style="text-align: center;"><i>Handwritten Signature</i></p>		
PARTIAL LANE CLOSURE ON RAMPS		

① Refer to SI-881 for sign details.



LEGEND	
x	Drum
↑	Traffic Sign
•	42" Channellizer
←	Direction of Traffic
▨	Work Area

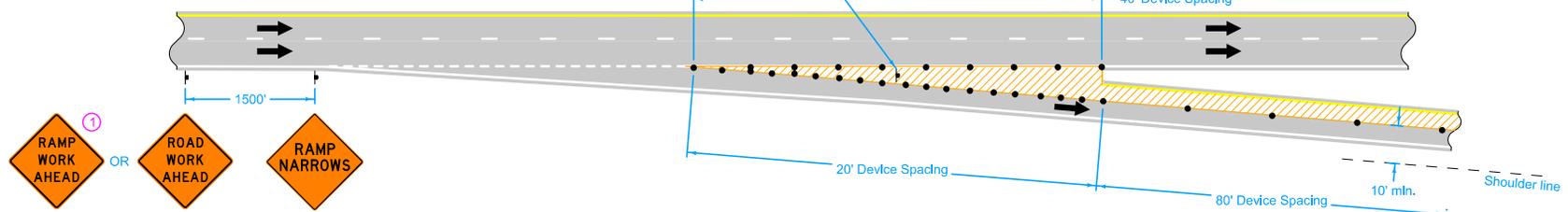
	REVISION
	3 10-15-19
STANDARD ROAD PLAN	TC-416
SHEET 3 of 4	
REVISIONS: New logo.	
APPROVED BY DESIGN METHODS ENGINEER	
PARTIAL LANE CLOSURE ON RAMPS	



- ① RAMP WORK AHEAD
W20-1A
48" x 48"
- OR
- ROAD WORK AHEAD
W20-1
48" x 48"
- ON RAMP
W13-4
36" x 36"
- RAMP NARROWS
W5-4
48" x 48"
- End of Taper

- ①
- ②
- ③
- EXIT
G20-23
48" x 48"
- G20-23A
12" x 36"

- ① Refer to SI-881 for sign details.
- ② Temporary EXIT sign, mounted so that bottom of sign is a minimum of 3 feet above pavement surface. If in place for more than one day, mount an Exit Number Panel with the proper exit number above the temporary EXIT sign.



- ① RAMP WORK AHEAD
W20-1A
48" x 48"
- OR
- ROAD WORK AHEAD
W20-1
48" x 48"
- ON RAMP
W13-4
36" x 36"
- RAMP NARROWS
W5-4
48" x 48"
- End of Taper

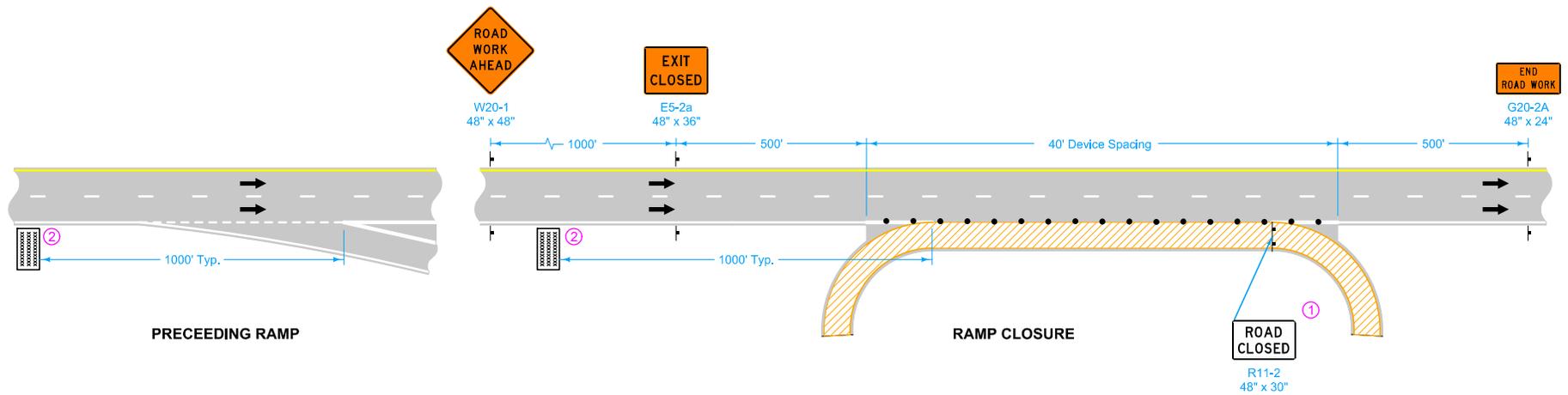
- 40' Device Spacing
- 20' Device Spacing
- 80' Device Spacing
- 10' min.
- Shoulder line

LEGEND

- Traffic Sign
- 42" Channellizer
- Direction of Traffic
- Work Area

	REVISION
	3 10-15-19
STANDARD ROAD PLAN	TC-416
REVISIONS: New logo.	SHEET 4 of 4
APPROVED BY DESIGN METHODS ENGINEER	
PARTIAL LANE CLOSURE ON RAMPS	

- ① A vehicle with an amber revolving light or amber strobe light may be substituted for the Type III barricade.
- ② Place Portable Dynamic Message Sign 3 calendar days prior to ramp closure. Leave in place until ramp is re-opened. The Engineer will determine the message to display.



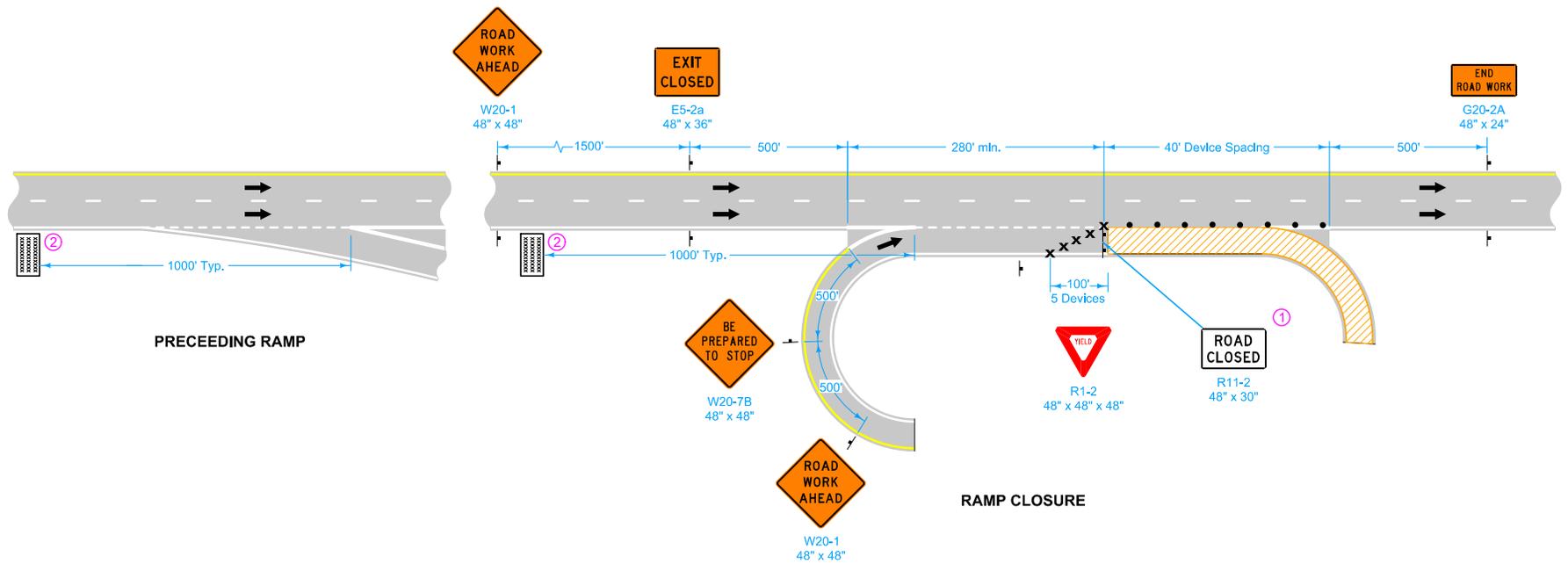
Possible Contract Items:
 Safety Closure
 Traffic Control
 Portable Dynamic Message Sign

Possible Tabulation:
 108-13A

LEGEND	
	Type III Barricade
	Traffic Sign
	42" Channelizer
	Direction of Traffic
	Work Area
	Portable Dynamic Message Sign

	REVISION
	5 04-21-20
	STANDARD ROAD PLAN
TC-417	
SHEET 1 of 3	
REVISIONS: Added Portable Dynamic Message Signs and new note 2. Retitled standard.	
APPROVED BY DESIGN METHODS ENGINEER	
EXIT RAMP CLOSURE	

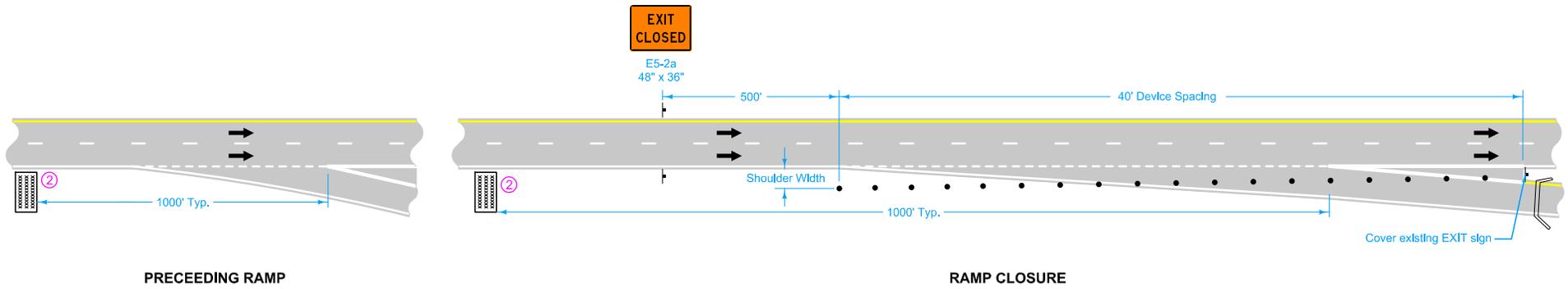
- ① A vehicle with an amber revolving light or amber strobe light may be substituted for the Type III barricade.
- ② Place Portable Dynamic Message Sign 3 calendar days prior to ramp closure. Leave in place until ramp is re-opened. The Engineer will determine the message to display.



LEGEND	
	Type III Barricade
	Traffic Sign
	Drum
	42" Channelizer
	Direction of Traffic
	Work Area
	Portable Dynamic Message Sign

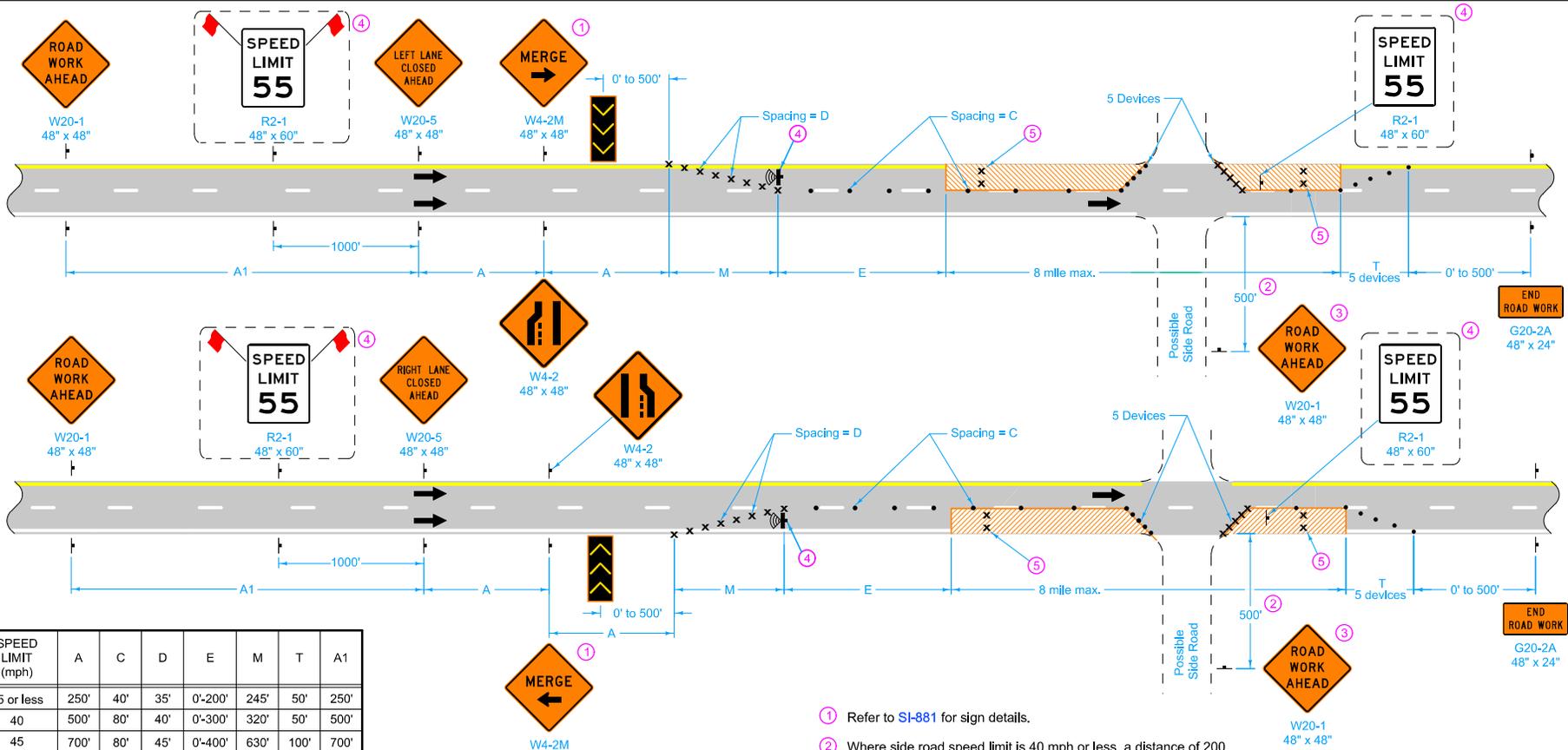
	REVISION
	5 04-21-20
STANDARD ROAD PLAN	TC-417
SHEET 2 of 3	
REVISIONS: Added Portable Dynamic Message Signs and new note 2. Retitled standard.	
APPROVED BY DESIGN METHODS ENGINEER	
EXIT RAMP CLOSURE	

② Place Portable Dynamic Message Sign 3 calendar days prior to ramp closure. Leave in place until ramp is re-opened. The Engineer will determine the message to display.



LEGEND	
	Road Closure
	Traffic Sign
	42" Channelizer
	Direction of Traffic
	Portable Dynamic Message Sign

	REVISION
	5 04-21-20
STANDARD ROAD PLAN	TC-417
SHEET 3 of 3	
REVISIONS: Added Portable Dynamic Message Signs and new note 2. Retitled standard.	
APPROVED BY DESIGN METHODS ENGINEER 	
EXIT RAMP CLOSURE	



SPEED LIMIT (mph)	A	C	D	E	M	T	A1
35 or less	250'	40'	35'	0'-200'	245'	50'	250'
40	500'	80'	40'	0'-300'	320'	50'	500'
45	700'	80'	45'	0'-400'	630'	100'	700'
50	700'	80'	45'	400'	630'	100'	700'
55 - 60	1000'	100'	55'	600'	770'	100'	2000'
65 - 70	1000'	100'	65'	700'	910'	100'	2000'

LEGEND

- Direction Of Traffic
- Traffic Sign
- Drum
- 42" Channelizer
- Speed Feedback Sign
- Arrow Board
- Work Area

When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signing, place RIGHT/LEFT LANE CLOSED 4 MILES and RIGHT/LEFT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, respectively, as appropriate.

Where there is a lane line drop-off or rise, do not allow traffic to cross over the drop-off or rise, except for ramp locations where a BUMP (W8-1) sign is placed.

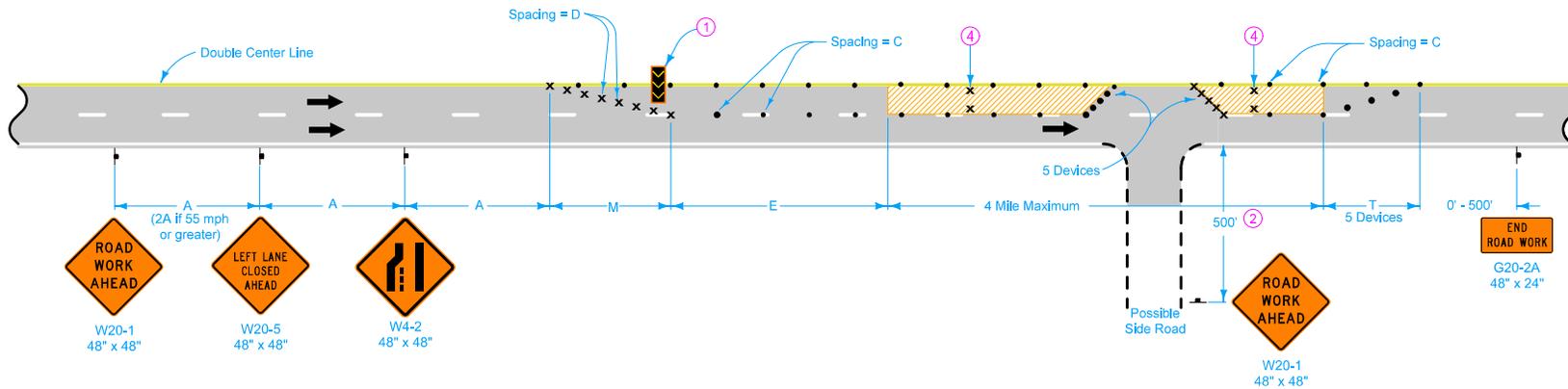
Lane line drop-offs greater than a nominal 4 inches are not allowed during non-working hours.

- 1 Refer to SI-881 for sign details.
- 2 Where side road speed limit is 40 mph or less, a distance of 200 feet is allowed.
- 3 Place a ROAD WORK AHEAD sign on the opposite side of the intersection in a similar location.
- 4 For roadways with a posted speed limit of 60 mph or greater before road work:
 - Place SPEED LIMIT 55 signs prior to the lane closure as shown.
 - When the length of closure is greater than 1 mile, install SPEED LIMIT 55 signs in the closed lane at 1-mile intervals.
 - Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect.
 - For traffic control zones lasting more than 4 hours, place a Speed Feedback Sign at the end of the merge taper.
- 5 For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

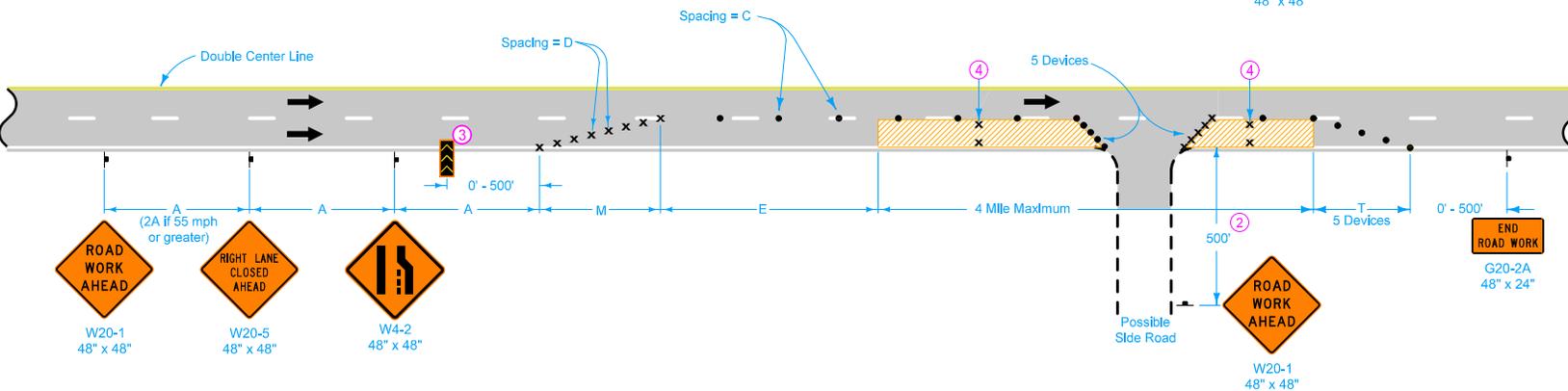
Possible Contract Item:
Traffic Control

IOWA DOT	REVISION
	13 4-21-20
STANDARD ROAD PLAN	TC-418
REVISIONS: Modified circle note 4.	SHEET 1 of 1
<i>Steve Miller</i> APPROVED BY DESIGN METHODS ENGINEER	
LANE CLOSURE ON DIVIDED HIGHWAY	

LEFT LANE CLOSURE



RIGHT LANE CLOSURE



LEGEND

- Traffic Sign
- Drum
- 42" Channelizer
- Arrow Board
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	C	D	E	M	T
35 or less	250'	40'	35'	0'-200'	245'	50'
40	500'	80'	40'	0'-300'	320'	50'
45	700'	80'	45'	0'-400'	630'	100'
50	700'	80'	45'	400'	630'	100'
55 - 60	1000'	100'	55'	600'	770'	100'

Where there is a lane line drop-off or rise, do not allow traffic to cross over the drop-off or rise, except for ramp locations where a BUMP (W8-1) sign is placed.

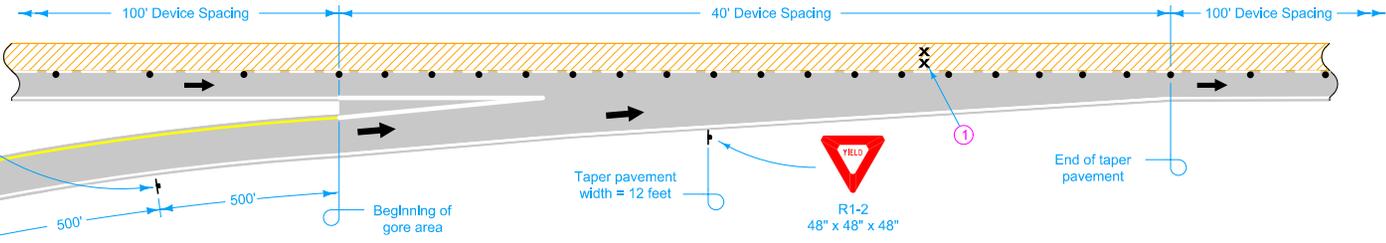
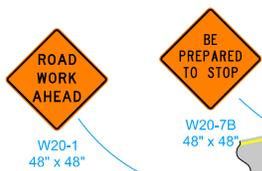
Lane line drop-offs greater than a nominal 4 inches are not allowed during non-working hours.

- ① Place arrow board within the closed lane behind the drums and as close to the beginning of the taper as practical.
- ② Where side road speed limit is 40 mph or less, a distance of 200 feet is allowed.
- ③ When there is no shoulder, place arrow board within the closed lane behind the drums and as close to the beginning of the taper as practical.
- ④ For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations, in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

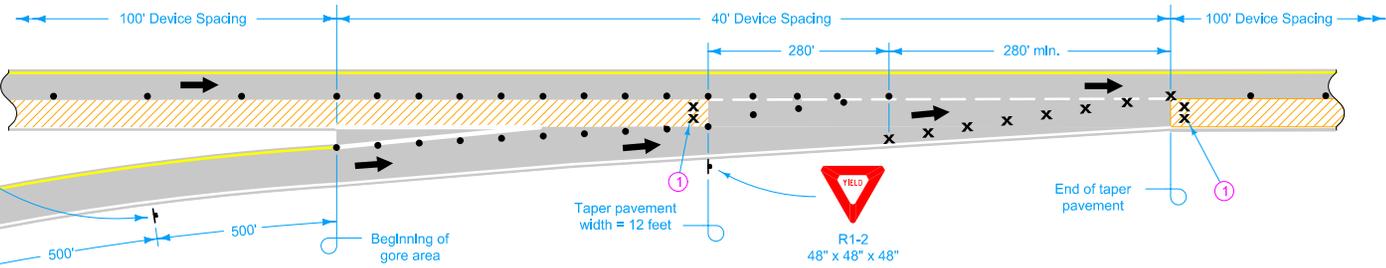
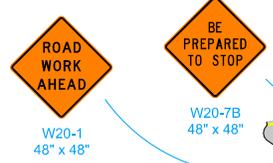
Possible Contract Item:

Traffic Control

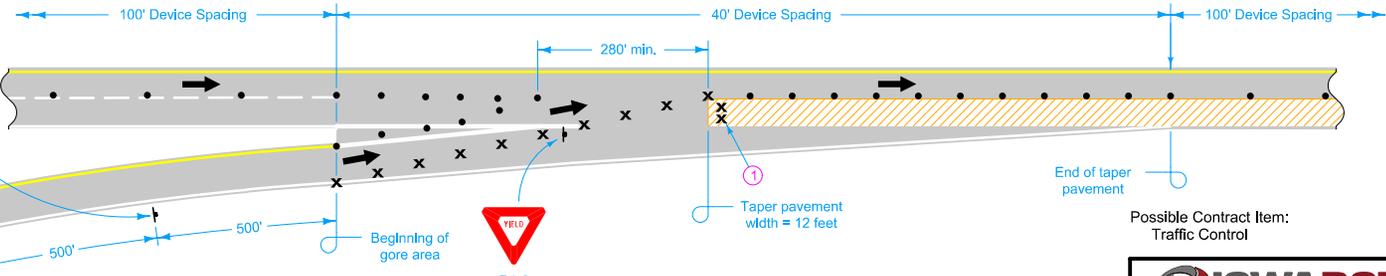
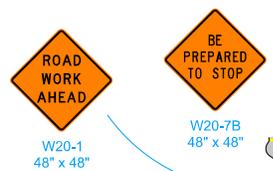
 STANDARD ROAD PLAN	REVISION
	8 10-16-18
	TC-419
SHEET 1 of 1	
<small>REVISIONS: Added circle note 4 and drums in the work area.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE ON UNDIVIDED HIGHWAY	



LEFT LANE CLOSURE THROUGH ENTRANCE RAMP



RIGHT LANE CLOSURE THROUGH ENTRANCE RAMP



STAGING THROUGH ENTRANCE RAMP

LEGEND

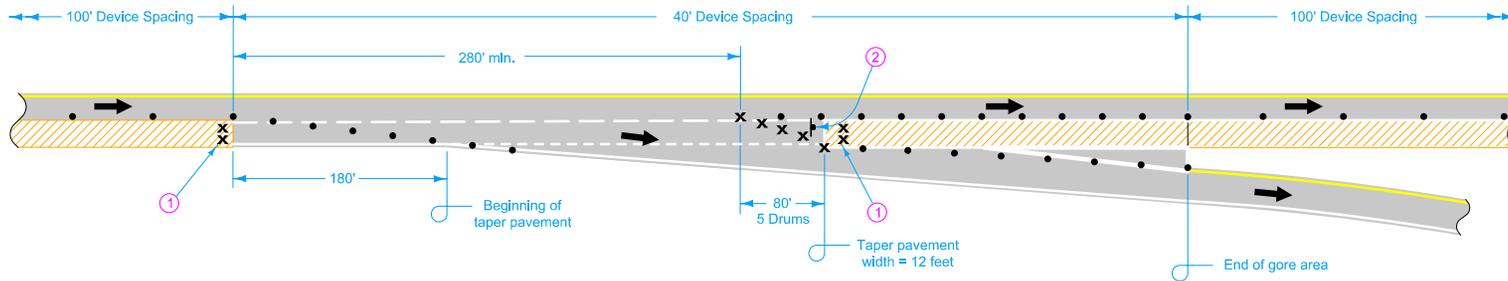
- x Drum
- T Traffic Sign
- 42" Channellizer
- ← Direction of Traffic
- Work Area

Possible Contract Item:
Traffic Control

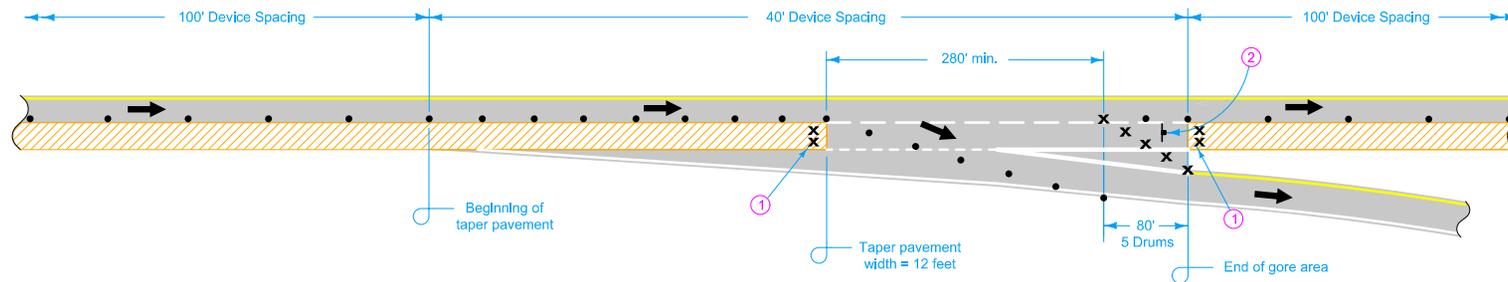
	REVISION
	7 10-16-18
	STANDARD ROAD PLAN
TC-420	
SHEET 1 of 5	
<small>REVISIONS: Added drums in work area and modified circle notes. Added Type III Barricade to Legend on Sheet 4.</small>	
APPROVED BY DESIGN METHODS ENGINEER	

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

LANE CLOSURE AT RAMPS



RIGHT LANE CLOSURE THROUGH EXIT RAMP



STAGING THROUGH EXIT RAMP

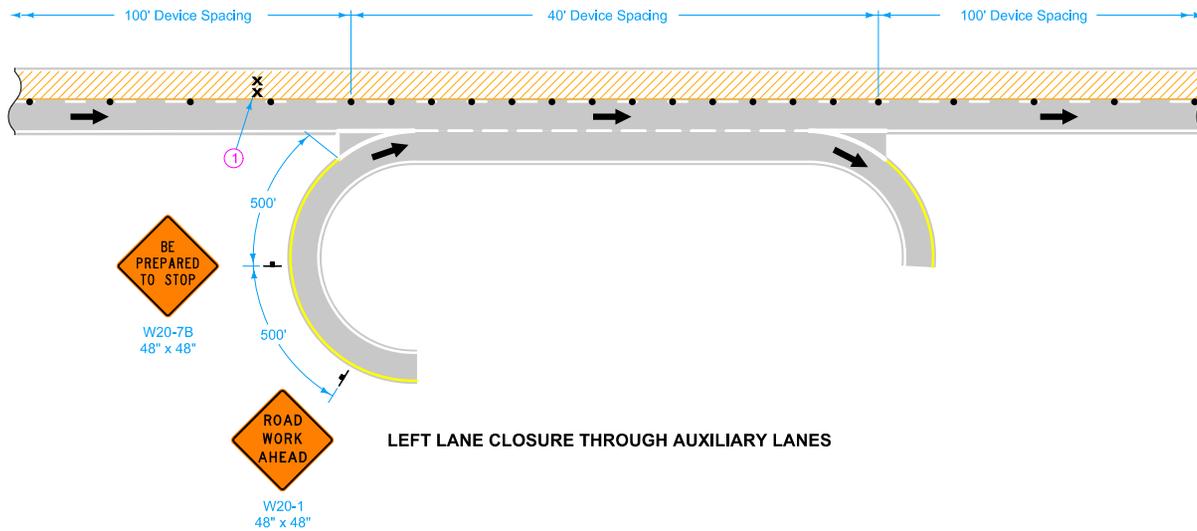
LEGEND

- × Drum
- ⊣ Traffic Sign
- 42" Channellizer
- ← Direction of Traffic
- ▨ Work Area

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

② Temporary EXIT sign, mounted so that bottom of sign is a minimum of 3 feet above pavement surface. If in place for more than one day, mount an Exit Number Panel with the proper exit number above the temporary EXIT sign. See SI-881 for details.

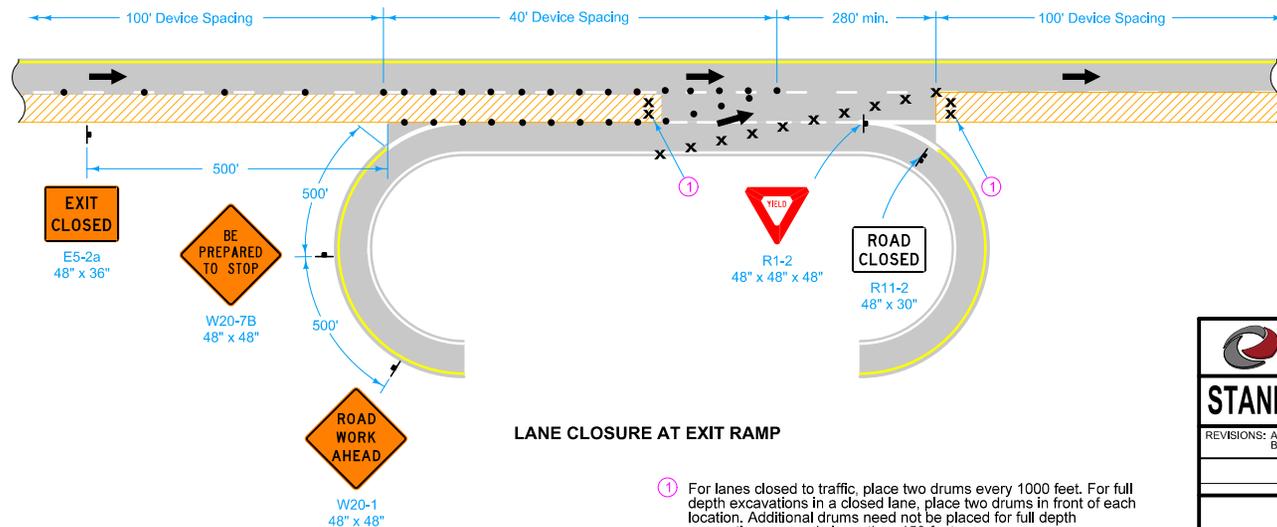
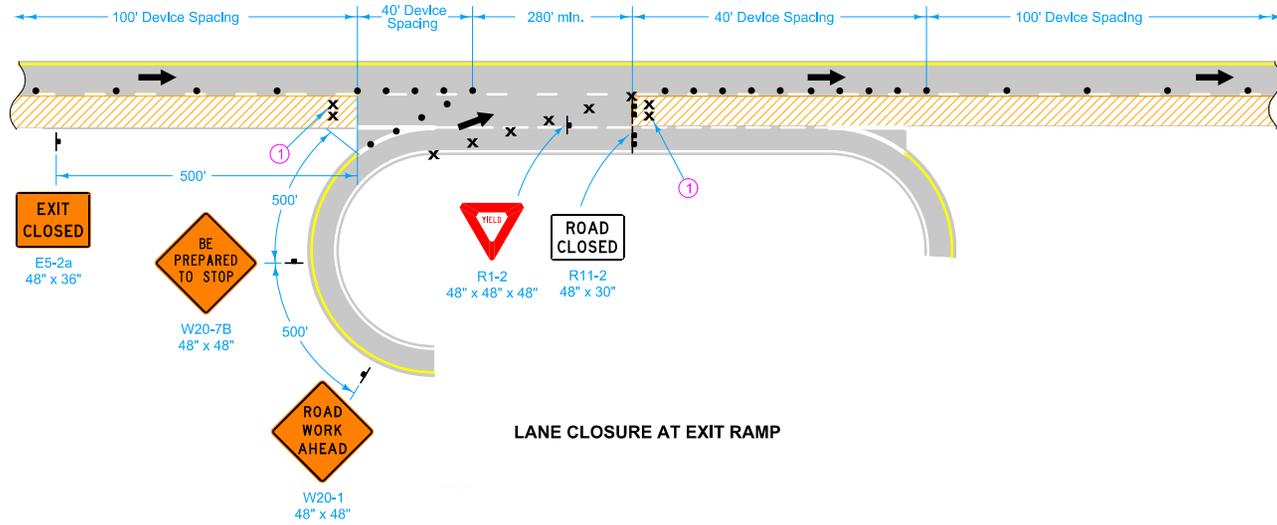
 STANDARD ROAD PLAN	REVISION
	7 10-16-18
TC-420	SHEET 2 of 5
REVISIONS: Added drums in work area and modified circle notes. Added Type III Barricade to Legend on Sheet 4.	
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE AT RAMPS	



LEGEND	
x	Drum
⊣	Traffic Sign
•	42" Channellizer
←	Direction of Traffic
	Work Area

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

	REVISION	
	7	10-16-18
STANDARD ROAD PLAN	TC-420	
	SHEET 3 of 5	
REVISIONS: Added drums in work area and modified circle notes. Added Type III Barricade to Legend on Sheet 4.		
APPROVED BY DESIGN METHODS ENGINEER		
LANE CLOSURE AT RAMPS		



① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

LEGEND	
	Type III Barricade
	Drum
	Traffic Sign
	42" Channellizer
	Direction of Traffic
	Work Area

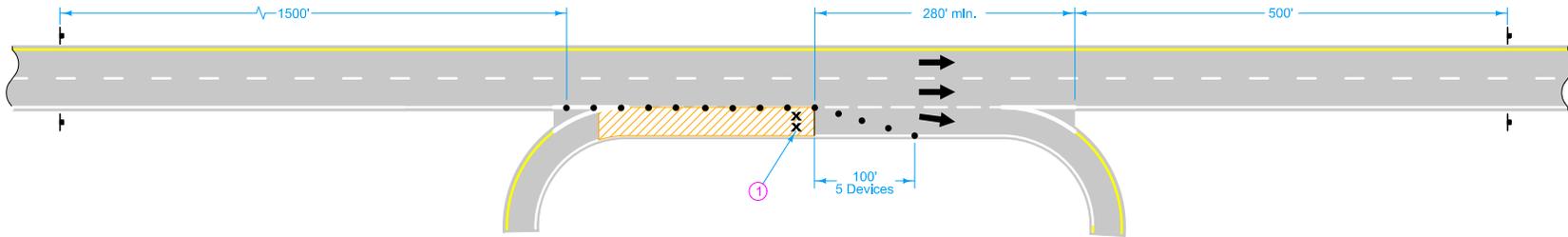
IOWA DOT	REVISION	
	7	10-16-18
STANDARD ROAD PLAN		TC-420
		SHEET 4 of 5
<small>REVISIONS: Added drums in work area and modified circle notes. Added Type III Barricade to Legend on Sheet 4.</small>		
 <small>APPROVED BY DESIGN METHODS ENGINEER</small>		
LANE CLOSURE AT RAMPS		



W20-1
48" x 48"



G20-2A
48" x 24"



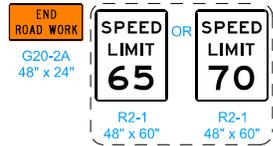
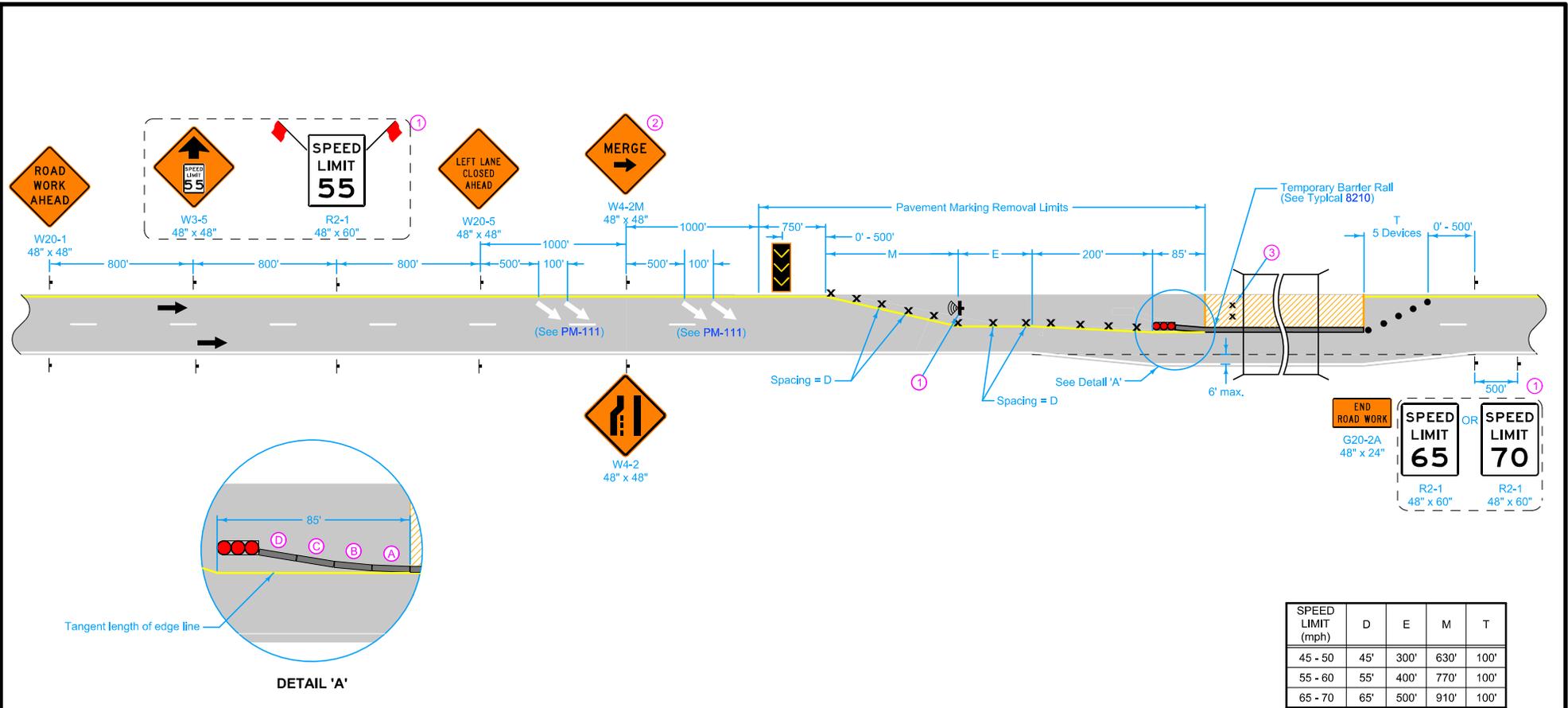
LANE CLOSURE AT EXIT RAMP

LEGEND

- x Drum
- † Traffic Sign
- 42" Channellizer
- ← Direction of Traffic
- ▨ Work Area

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

IOWA DOT	REVISION	
	7	10-16-18
STANDARD ROAD PLAN	TC-420	
	SHEET 5 of 5	
<small>REVISIONS: Added drums in work area and modified circle notes. Added Type III Barricade to Legend on Sheet 4.</small>		
<small>APPROVED BY DESIGN METHODS ENGINEER</small>		
LANE CLOSURE AT RAMPS		



SPEED LIMIT (mph)	D	E	M	T
45 - 50	45'	300'	630'	100'
55 - 60	55'	400'	770'	100'
65 - 70	65'	500'	910'	100'

LEGEND

- Traffic Sign
- Drum
- 42" Channelizer
- Speed Feedback Sign
- Arrow Board
- Temporary Crash Cushion
- Work Area
- Direction of Traffic

When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signed, place RIGHT LANE CLOSED 4 MILES and RIGHT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, respectively.

Place Concrete Barrier Markers at 10 ft C/C on bridge rail.

① For roadways with a posted speed limit of 60 mph or greater before road work:

Place SPEED LIMIT AHEAD sign and SPEED LIMIT 55 sign prior to the lane closure as shown. Place SPEED LIMIT 65 or 70 beyond the work area as shown.

For traffic control zones lasting more than 4 hours, place a Speed Feedback Sign at the end of the merge taper.

② Refer to SI-881 for sign details.

③ For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Items:

- Painted Symbols and Legends
- Pavement Marking Items
- Pavement Markings Removed
- Symbols and Legends Removed
- Temporary Barrier Rail
- Temporary Crash Cushions

Possible Tabulations:

- 108-22
- 108-29
- 108-30
- 108-33

STANDARD ROAD PLAN

REVISIONS: Modified circle note 1.

APPROVED BY DESIGN METHODS ENGINEER

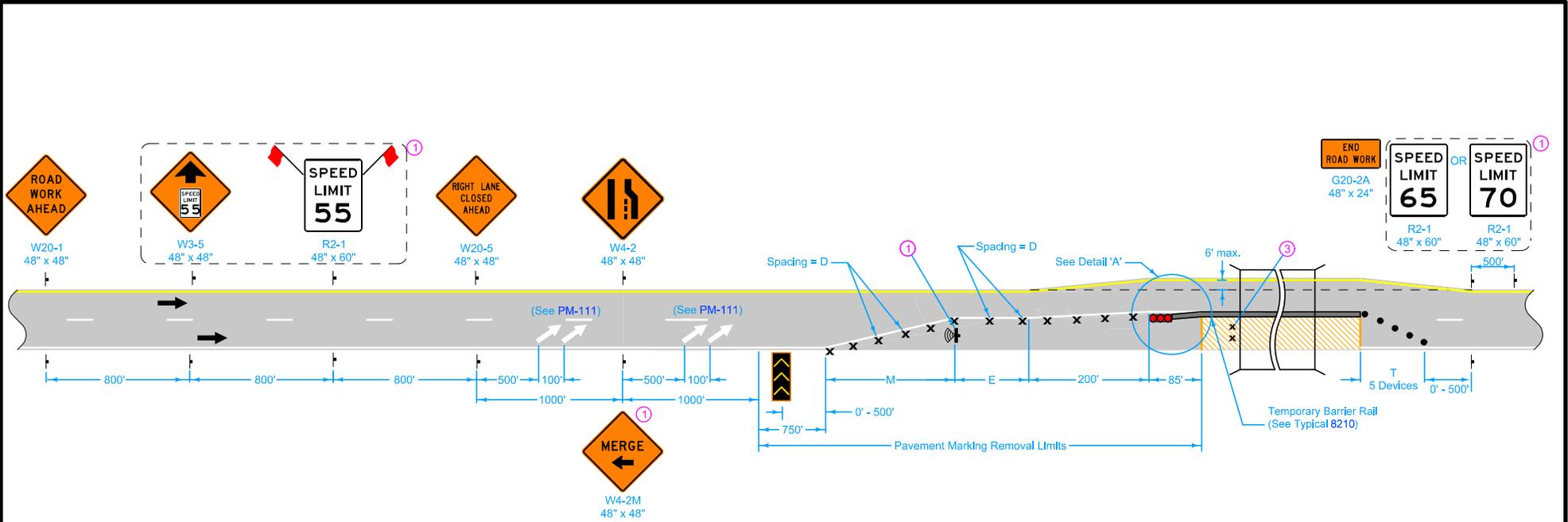
REVISION

17	4-21-20
----	---------

TC-421

SHEET 1 of 2

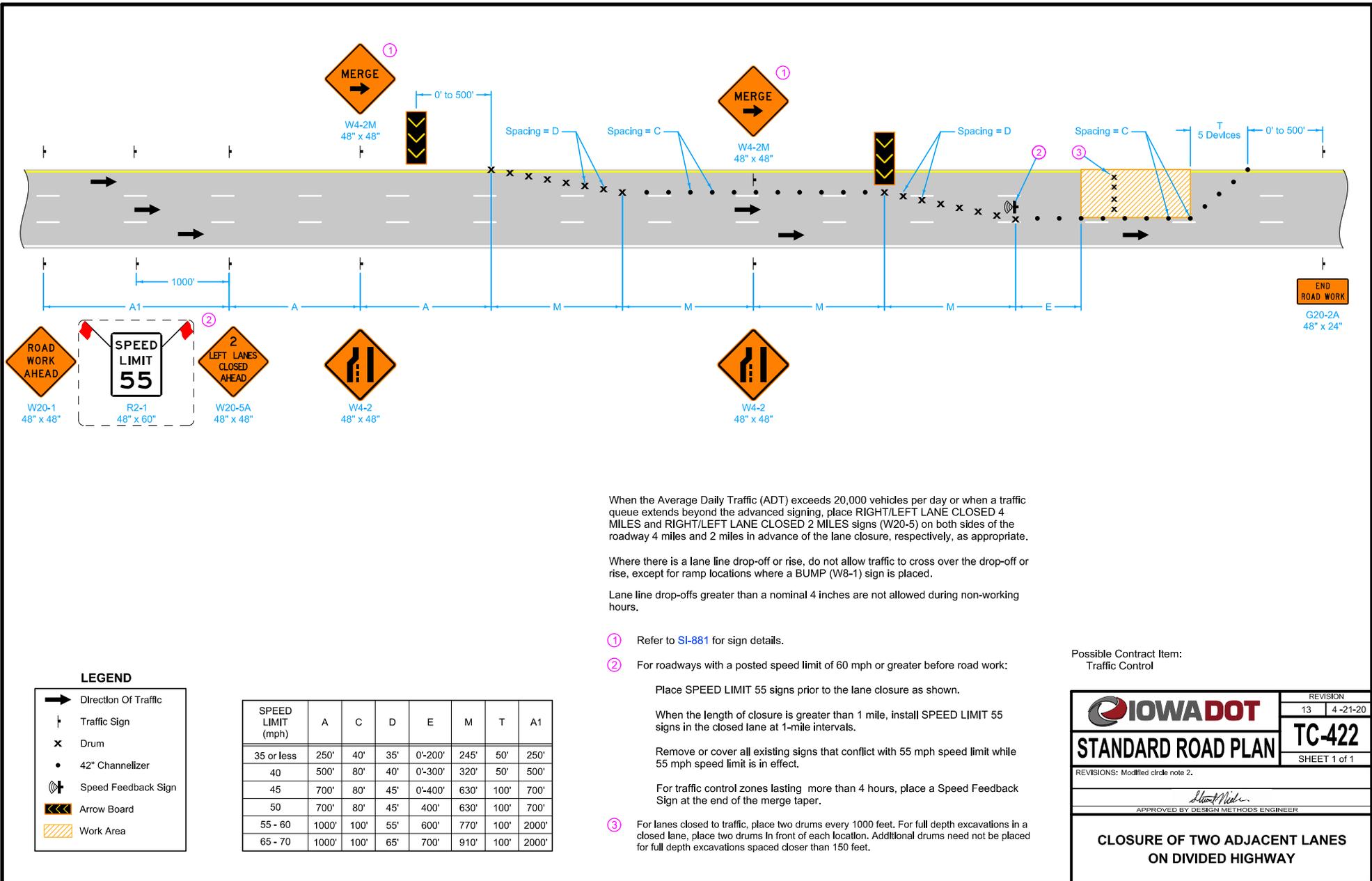
LANE CLOSURE WITH TBR



LEGEND	
⊥	Traffic Sign
x	Drum
•	42" Channelizer
⊕	Speed Feedback Sign
←←←	Arrow Board
●●●	Temporary Crash Cushion
▨	Work Area
→	Direction of Traffic

- ① For roadways with a posted speed limit of 60 mph or greater before road work:
Place SPEED LIMIT AHEAD sign and SPEED LIMIT 55 sign prior to the lane closure as shown. Place SPEED LIMIT 65 or 70 beyond the work area as shown.
For traffic control zones lasting more than 4 hours, place a Speed Feedback Sign at the end of the merge taper.
- ② Refer to SI-881 for sign details.
- ③ For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

	REVISION
	17 4-21-20
STANDARD ROAD PLAN	TC-421
	SHEET 2 of 2
<small>REVISIONS: Modified circle note 1.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
LANE CLOSURE WITH TBR	



When the Average Daily Traffic (ADT) exceeds 20,000 vehicles per day or when a traffic queue extends beyond the advanced signing, place RIGHT/LEFT LANE CLOSED 4 MILES and RIGHT/LEFT LANE CLOSED 2 MILES signs (W20-5) on both sides of the roadway 4 miles and 2 miles in advance of the lane closure, as appropriate.

Where there is a lane line drop-off or rise, do not allow traffic to cross over the drop-off or rise, except for ramp locations where a BUMP (W8-1) sign is placed.

Lane line drop-offs greater than a nominal 4 inches are not allowed during non-working hours.

- ① Refer to SI-881 for sign details.
- ② For roadways with a posted speed limit of 60 mph or greater before road work:

Place SPEED LIMIT 55 signs prior to the lane closure as shown.

When the length of closure is greater than 1 mile, install SPEED LIMIT 55 signs in the closed lane at 1-mile intervals.

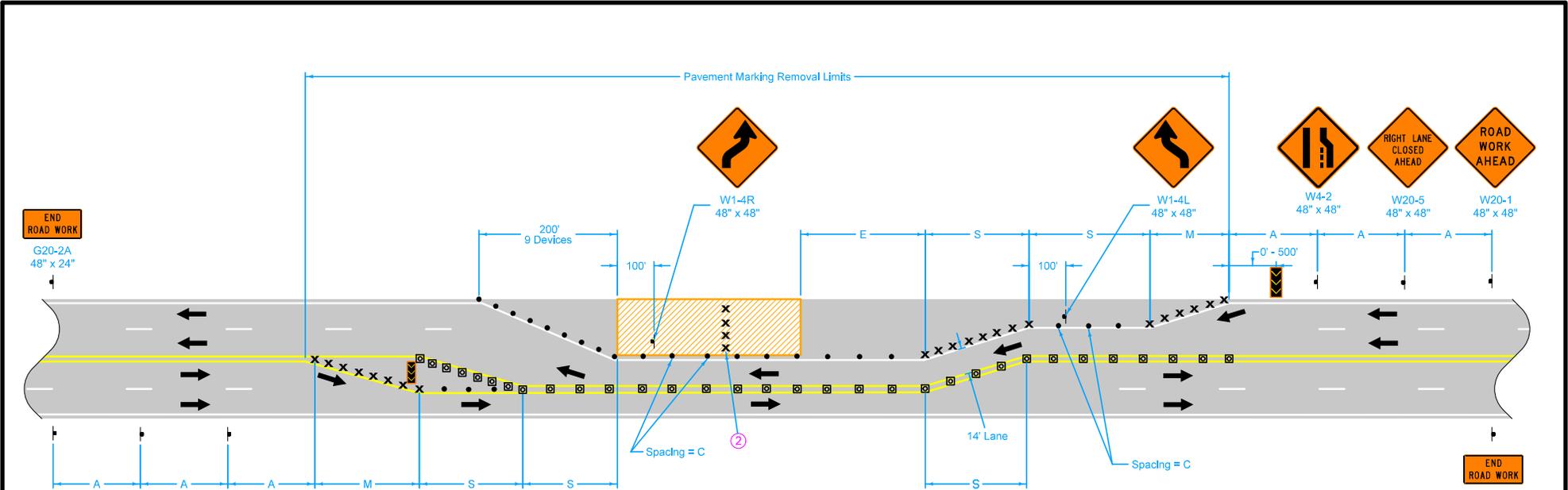
Remove or cover all existing signs that conflict with 55 mph speed limit while 55 mph speed limit is in effect.

For traffic control zones lasting more than 4 hours, place a Speed Feedback Sign at the end of the merge taper.

- ③ For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:
Traffic Control

IOWA DOT	REVISION	
	13	4-21-20
STANDARD ROAD PLAN	TC-422	
SHEET 1 of 1		
REVISIONS: Modified circle note 2.		
 APPROVED BY DESIGN METHODS ENGINEER		
CLOSURE OF TWO ADJACENT LANES ON DIVIDED HIGHWAY		



LEGEND

- Traffic Sign
- Drum ①
- 42" Channelizer
- Arrow Board
- Work Area
- Direction of Traffic
- Temporary Lane Separator System ③

SPEED LIMIT (mph)	A	C	D	E	M	S
35 or less	250'	40'	35'	0'-200'	245'	140'
40	500'	80'	40'	0'-300'	320'	160'
45	700'	80'	45'	0'-400'	630'	315'
50	700'	80'	45'	400'	630'	315'
55 - 60	1000'	100'	55'	600'	770'	385'

For traffic control zones in place for 3 calendar days or less, place arrow boards, devices and signs as shown. For traffic control zones in place for 4 calendar days or more, also remove permanent pavement markings and place temporary pavement markings as shown.

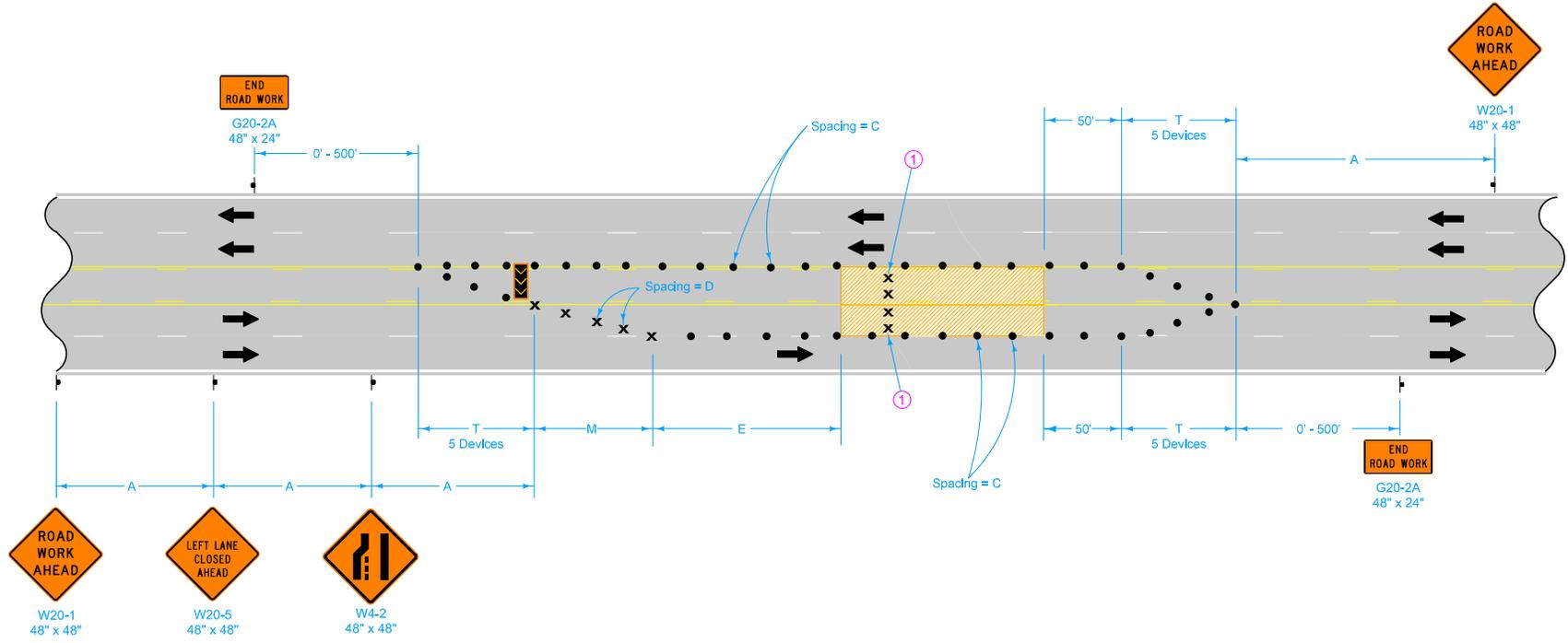
When this layout is used during nighttime hours and the width of existing traffic lanes is 11 feet or less, use tubular markers to separate two-way two-lane traffic.

- ① Spacing = D for drums placed in tapers.
- ② For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.
- ③ For work zones in place more than 3 calendar days, use TLSS. For work zones in place for 3 calendar days or less, 42" channelizers spaced at 40' c/c may be substituted for TLSS.

Possible Contract Items:
 Pavement Marking Items
 Pavement Markings Removed
 Traffic Control
 Temporary Lane Separator System

Possible Tabulation:
 108-22

IOWA DOT	REVISION	
	10	10-20-20
STANDARD ROAD PLAN	TC-423	
REVISIONS: Modified circle note 3.		
<i>Steve Miller</i> APPROVED BY DESIGN METHODS ENGINEER		
CLOSURE OF TWO ADJACENT LANES ON UNDIVIDED HIGHWAY		



LEGEND

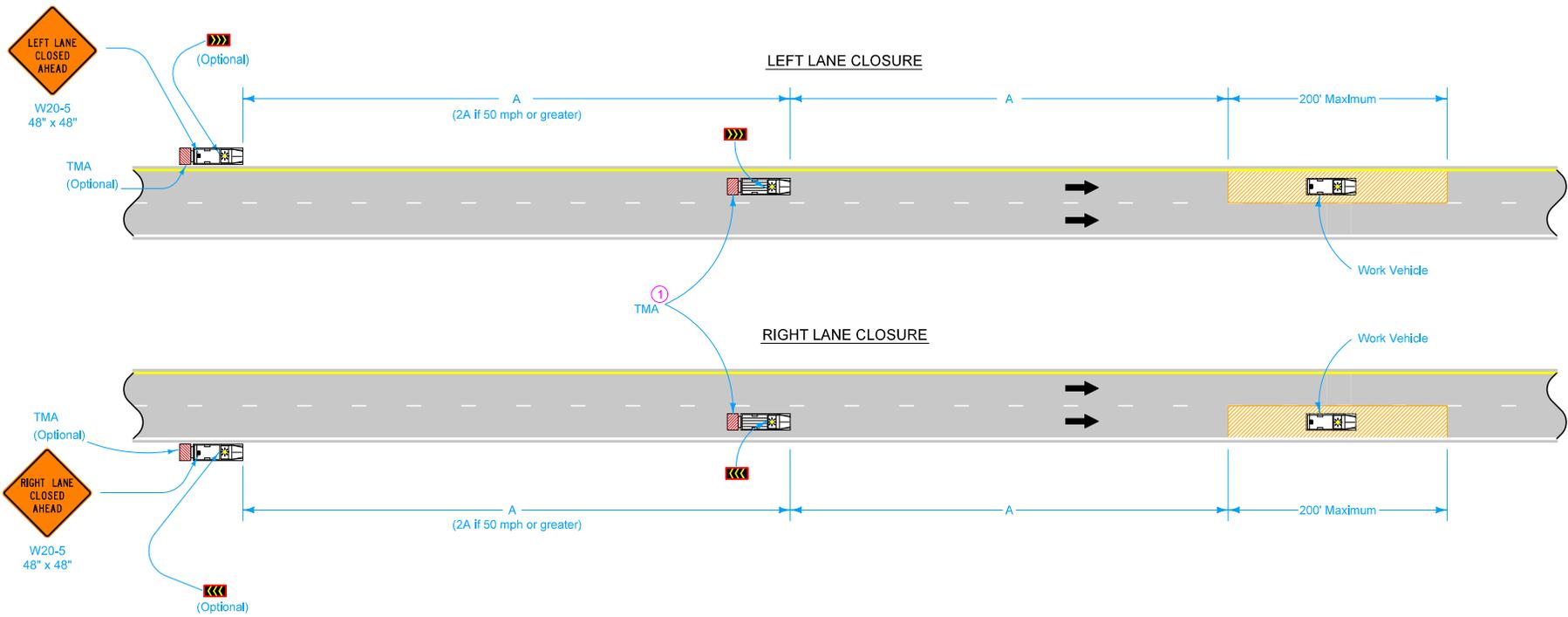
- 42" Channellizer
- X Drum
- † Traffic Stgn
- Work Area
- ← Direction of Traffic
- Arrow Board

SPEED LIMIT (mph)	A	C	D	E	M	T
35 or less	250'	40'	35'	0'-200'	245'	50'
40	500'	80'	40'	0'-300'	320'	50'
45	700'	80'	45'	0'-400'	630'	100'
50	700'	80'	45'	400'	630'	100'
55 - 60	1000'	100'	55'	600'	770'	100'

① For lanes closed to traffic, place two drums every 1000 feet. For full depth excavations in a closed lane, place two drums in front of each location. Additional drums need not be placed for full depth excavations spaced closer than 150 feet.

Possible Contract Item:
Traffic Control

 STANDARD ROAD PLAN	REVISION
	6 10-16-18
	TC-429
SHEET 1 of 1	
<small>REVISIONS: Added circle note 1 and drums in the work area. Updated DOT logo.</small>	
<small>APPROVED BY DESIGN METHODS ENGINEER</small>	
CLOSURE OF CONTINUOUS TWO-WAY LEFT-TURN LANE AND ADJACENT LANE	



W20-5
48" x 48"

W20-5
48" x 48"

LEGEND

- Traffic Sign
- Work Area
- Arrow Board
- Direction of Traffic
- Truck-Mounted Attenuator (TMA)

SPEED LIMIT (mph)	A
35 or less	300'
40 - 45	500'
50 - 55	500'
60 or greater	1000'

Equip all vehicles with an amber revolving light or amber strobe light.

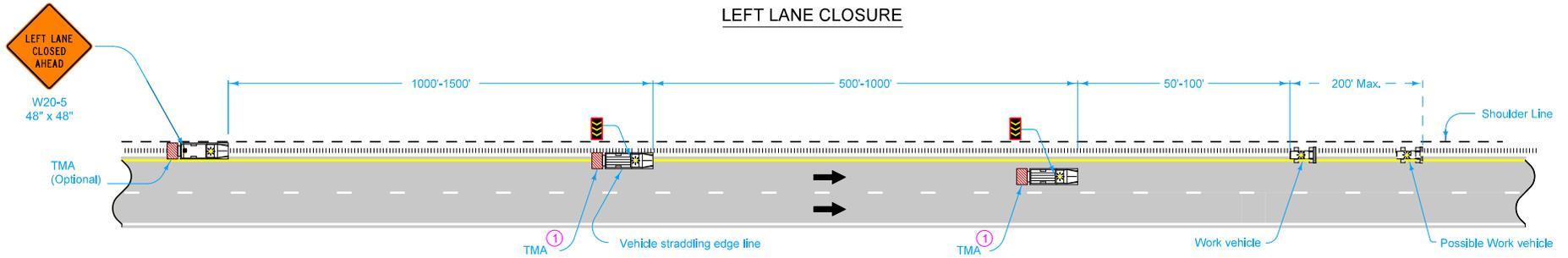
This layout is intended for use with slow-moving operations involving stops not to exceed 30 minutes. For stops exceeding 30 minutes, use TC-418 or TC-419.

① TMA required for speed limits of 55 mph or greater.

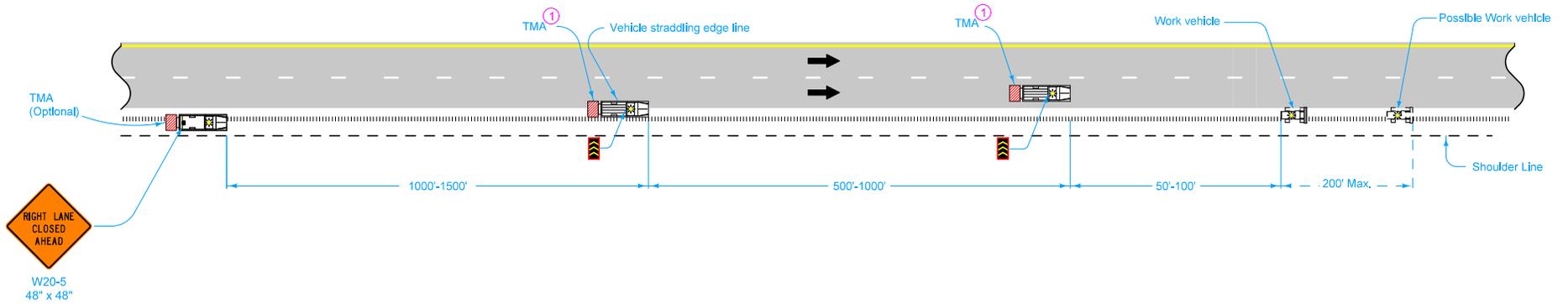
Possible Contract Item:
Traffic Control

	REVISION
	7 10-17-17
STANDARD ROAD PLAN	TC-431
REVISIONS: Added Circle Note 1.	SHEET 1 of 1
APPROVED BY DESIGN METHODS ENGINEER	
SLOW MOVING VEHICLE OPERATING IN THE TRAFFIC LANE	

LEFT LANE CLOSURE



RIGHT LANE CLOSURE



LEGEND	
	Traffic Sign
	Arrow Board
	Truck Mounted Attenuator (TMA)
	Direction of Traffic

Equip all vehicles with an amber revolving light or amber strobe light.

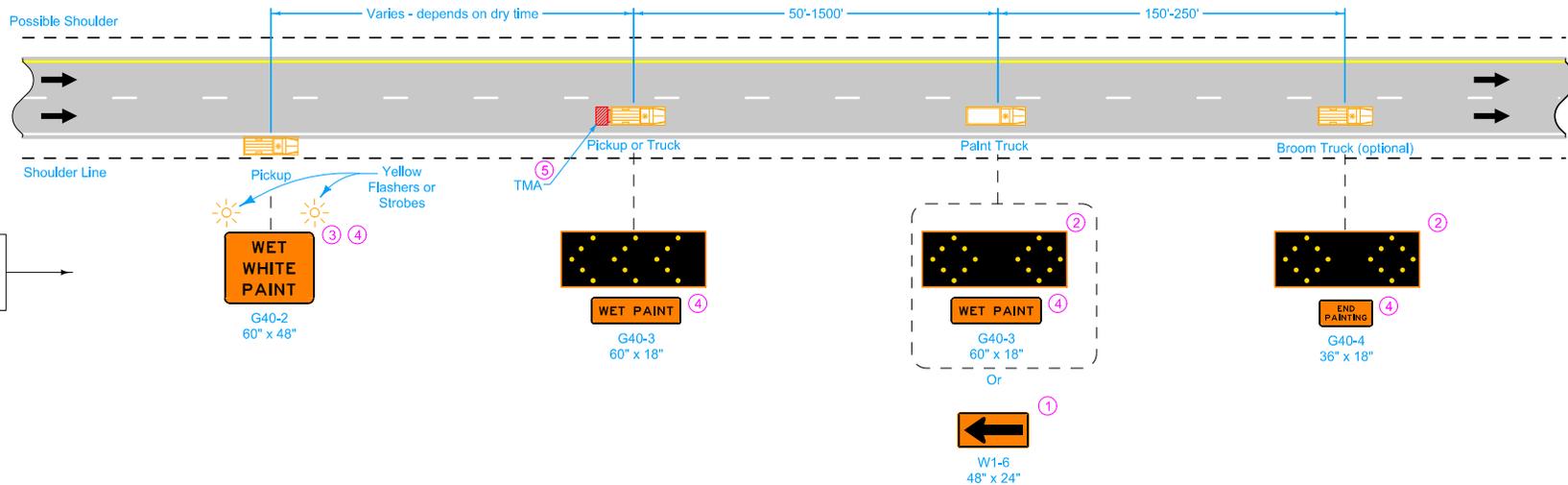
When fog sealing the milled rumble strips, place a 48" X 48" FRESH OIL sign (W21-2) at the beginning of the work area. Place additional FRESH OIL signs after each intersection and periodically through the work area so that signs are no more than 2 miles apart.

Operators should adjust their spacing, as necessary, to keep adjacent vehicles within view.

① TMA required for speed limits of 55 mph or greater.

Possible Contract Item:
Traffic Control

	REVISION
	5 10-17-17
STANDARD ROAD PLAN	TC-432
REVISIONS: Added Circle Note 1.	SHEET 1 of 1
 APPROVED BY DESIGN METHODS ENGINEER	
SHOULDER RUMBLE STRIP OPERATIONS	



SIGNS FACING TRAFFIC
APPROACHING FROM
THE REAR

OUTSIDE EDGELINE OR LANELINE - DIVIDED OR UNDIVIDED

Equip all vehicles with an amber revolving light or amber strobe light.

Possible Contract Item:
Traffic Control

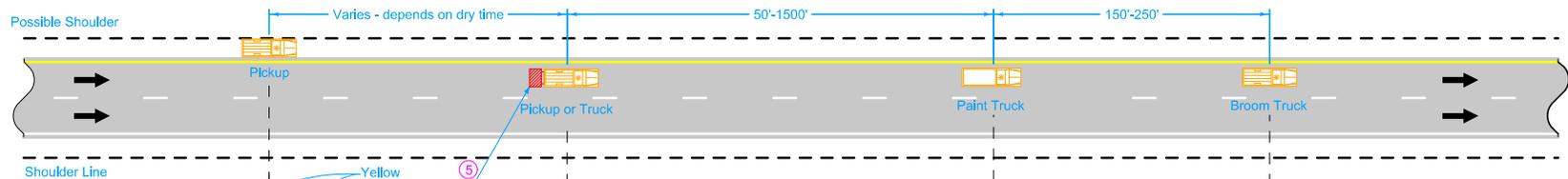
- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow board may be operated in a four-corner caution mode.
- ③ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ④ Refer to [SI-881](#) for sign details.
- ⑤ TMA required for speed limits of 55 mph or greater.

LEGEND

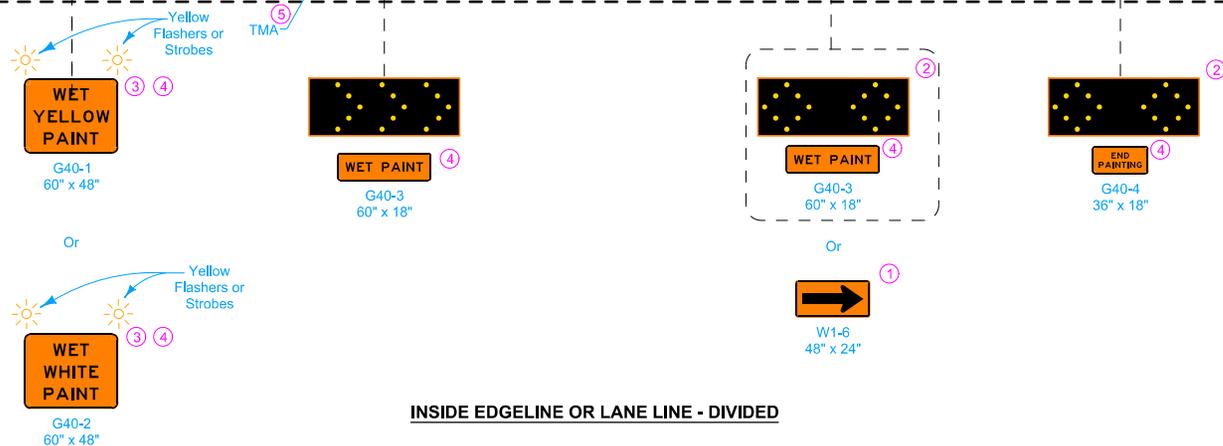
← Direction of Traffic

▣ Truck-Mounted Attenuator (TMA)

	REVISION
	7 10-17-17
STANDARD ROAD PLAN	TC-433
REVISIONS: Added Circle Note 5.	SHEET 1 of 3
 APPROVED BY DESIGN METHODS ENGINEER	
PAVEMENT MARKING OPERATIONS	



SIGNS FACING TRAFFIC
APPROACHING FROM
THE REAR



INSIDE EDGE LINE OR LANE LINE - DIVIDED

LEGEND

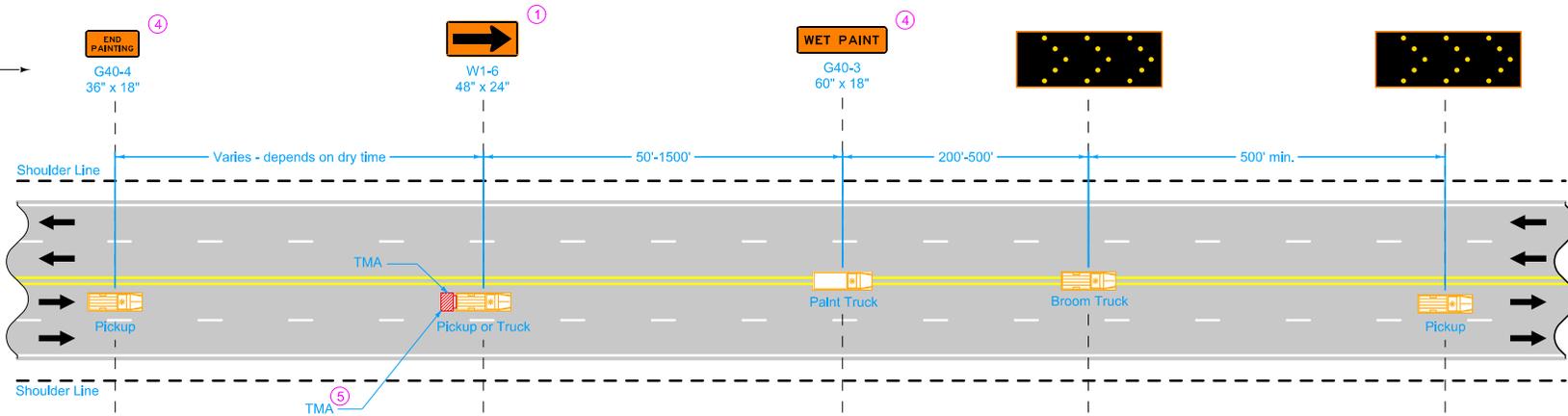
← Direction of Traffic

▧ Truck-Mounted Attenuator (TMA)

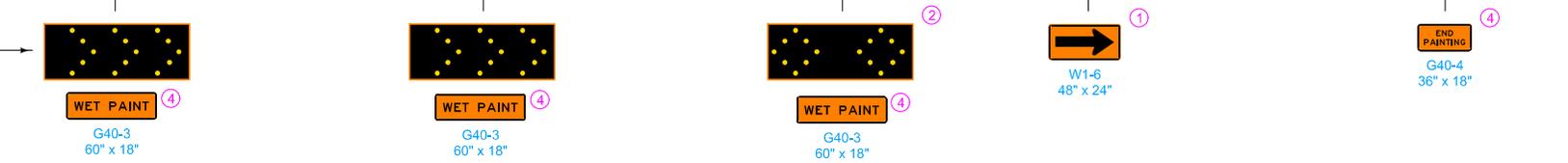
- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow board may be operated in a four-corner caution mode.
- ③ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ④ Refer to [SI-881](#) for sign details.
- ⑤ TMA required for speed limits of 55 mph or greater.

IOWA DOT	REVISION	
	7	10-17-17
STANDARD ROAD PLAN	TC-433	
SHEET 2 of 3		
REVISIONS: Added Circle Note 5.		
 APPROVED BY DESIGN METHODS ENGINEER		
PAVEMENT MARKING OPERATIONS		

SIGNS FACING
OPPOSING TRAFFIC



SIGNS FACING TRAFFIC
APPROACHING FROM
THE REAR



CENTERLINE - UNDIVIDED ONLY

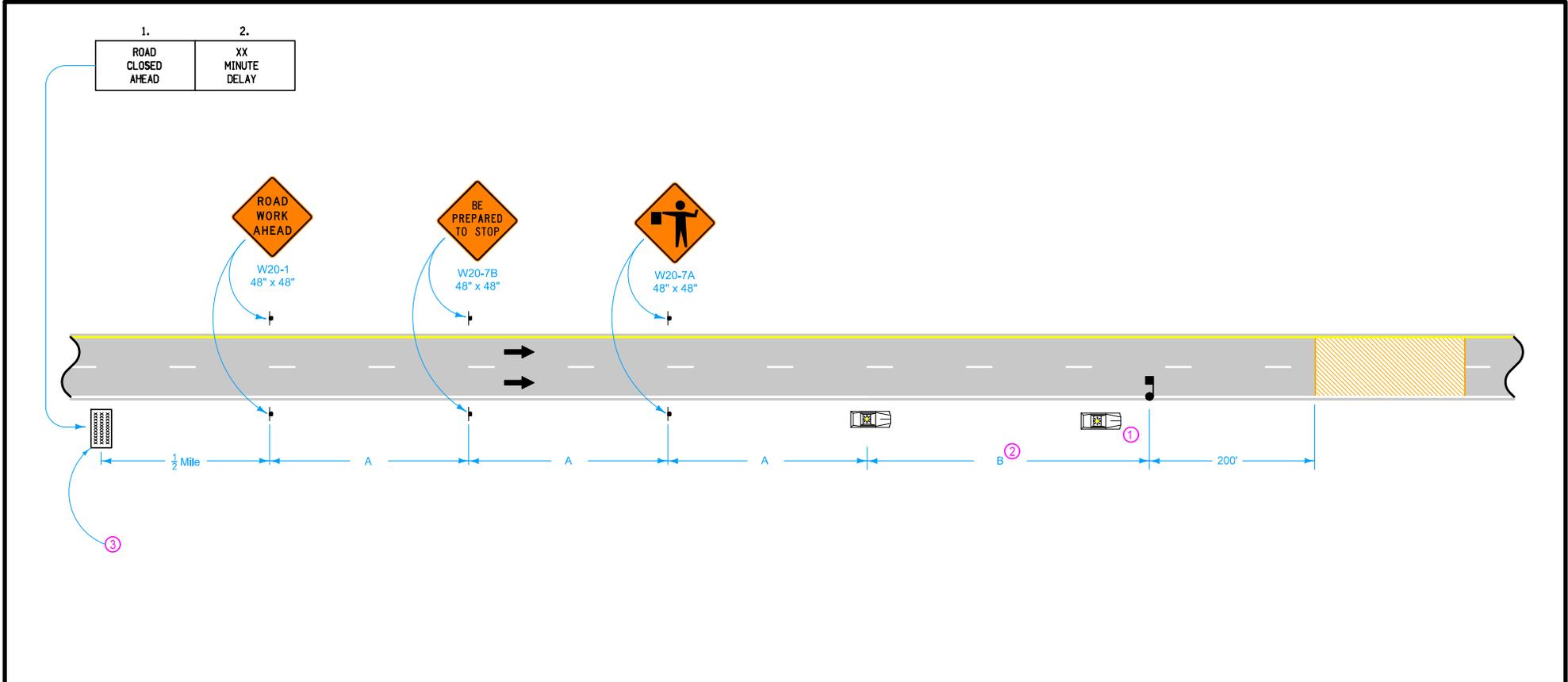
- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow board may be operated in a four-corner caution mode.
- ④ Refer to [SI-881](#) for sign details.
- ⑤ TMA required for speed limits of 55 mph or greater.

LEGEND

← Direction of Traffic

▨ Truck-Mounted Attenuator (TMA)

	REVISION
	7 10-17-17
STANDARD ROAD PLAN	TC-433
REVISIONS: Added Circle Note 5.	SHEET 3 of 3
 APPROVED BY DESIGN METHODS ENGINEER	
PAVEMENT MARKING OPERATIONS	



1. ROAD CLOSED AHEAD
2. XX MINUTE DELAY

ROAD WORK AHEAD
W20-1
48" x 48"

BE PREPARED TO STOP
W20-7B
48" x 48"

W20-7A
48" x 48"

1/2 Mile

A

A

A

B

200'

LEGEND

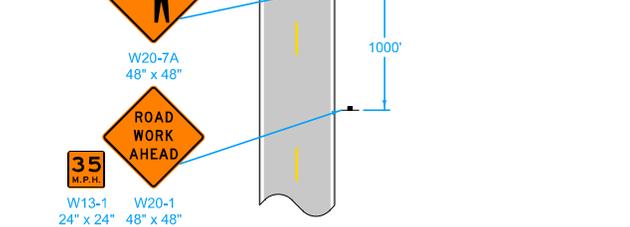
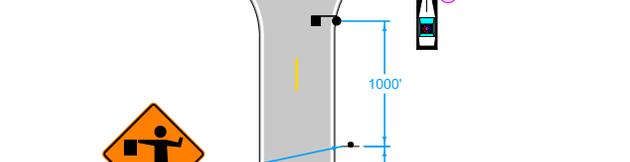
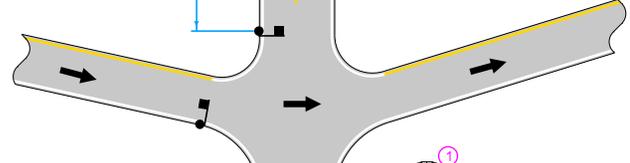
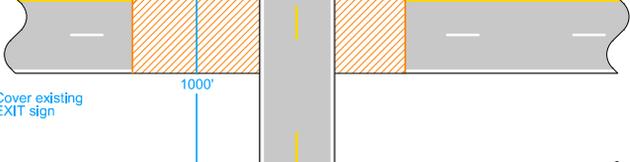
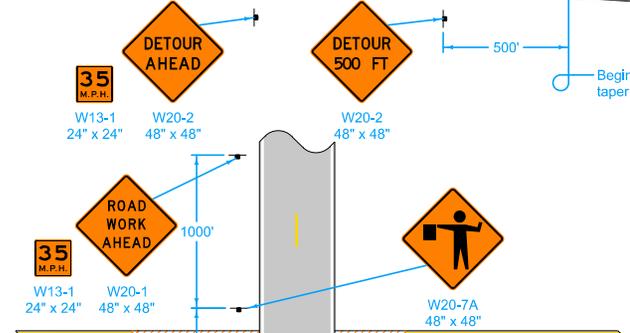
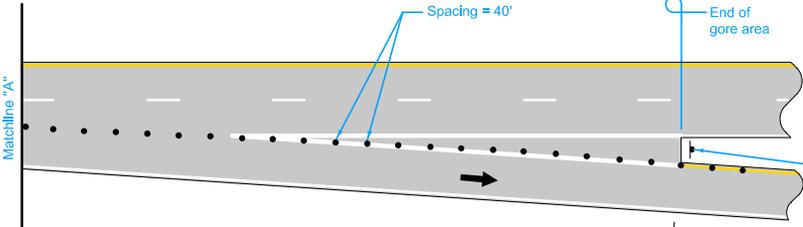
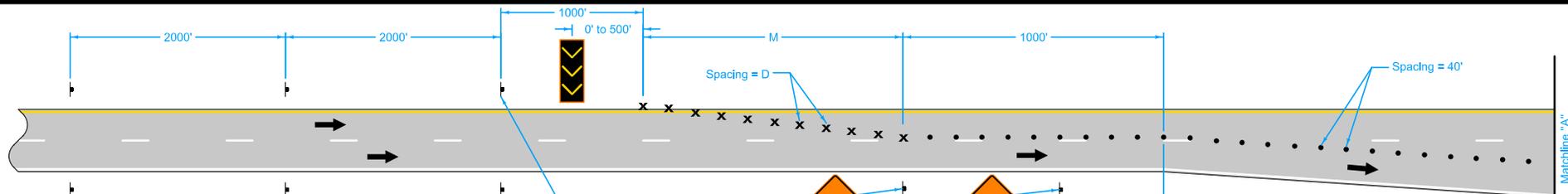
- Traffic Sign
- Law Enforcement Vehicle
- Flagger
- Portable Dynamic Message Sign
- Work Area
- Direction of Traffic

SPEED LIMIT (mph)	A	B
35 or less	250'	250'
40 - 45	350'	350'
50 or greater	1000'	2500'

- This layout is intended for a preplanned closure of 20 minutes or less.
- ① A vehicle with an amber revolving light or amber strobe light may be substituted for leading law enforcement vehicle.
 - ② This distance may be increased to provide adequate storage for stopped vehicles.
 - ③ Optional for speed limits less than 55 mph.

Possible Contract Items:
 Flaggers
 Portable Dynamic Message Sign
 Traffic Control

 STANDARD ROAD PLAN	REVISION
	7 04-21-15
TC-451	SHEET 1 of 1
REVISIONS: Corrected typo in title.	
 APPROVED BY DESIGN METHODS ENGINEER	
TEMPORARY ROAD CLOSURE ON DIVIDED HIGHWAY	



SPEED LIMIT (mph)	M	D
55 - 60	770'	55'
65 - 70	910'	65'

LEGEND

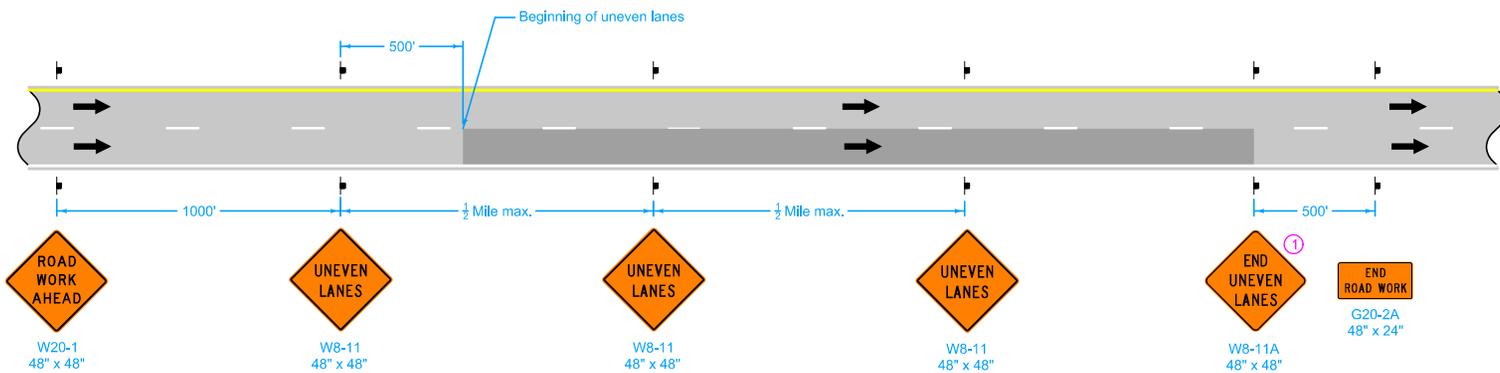
- x Drum
- ⊢ Traffic Sign
- 42" Channelizer
- Law Enforcement Vehicle
- Arrow Board
- Flagger
- Work Area
- Direction of Traffic

Give priority to mainline traffic on the ramp.
 Stop side road traffic before mainline traffic is rerouted onto ramp.

- ① For ADT less than 2000, a Contractor vehicle may be substituted for the Enforcement vehicle.
- ② Refer to SI-881 for sign details.

Possible Contract Items:
 Flaggers
 Traffic Control

	REVISION
	7 10-17-17
	STANDARD ROAD PLAN TC-454
SHEET 1 of 1	
REVISIONS: Added Designer Info button and updated DOT logo.	
 APPROVED BY DESIGN METHODS ENGINEER	
TEMPORARY DETOUR USING RAMPS ON DIVIDED HIGHWAY	



① Refer to SI-881 for sign details.

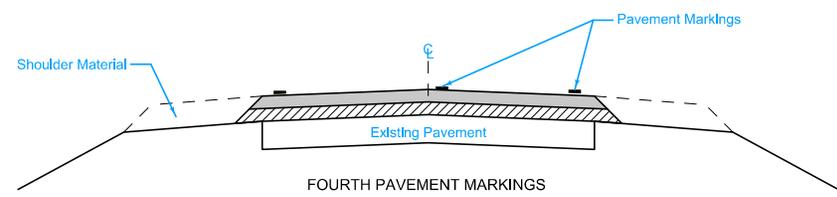
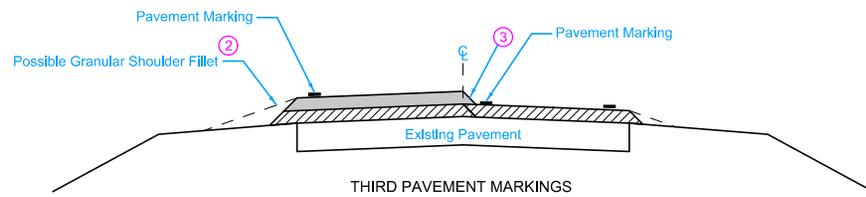
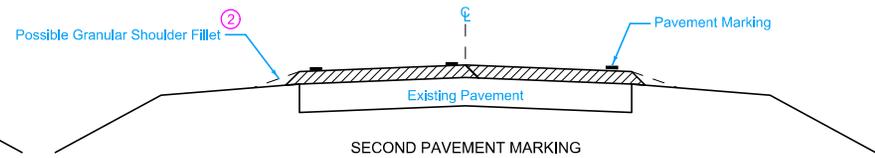
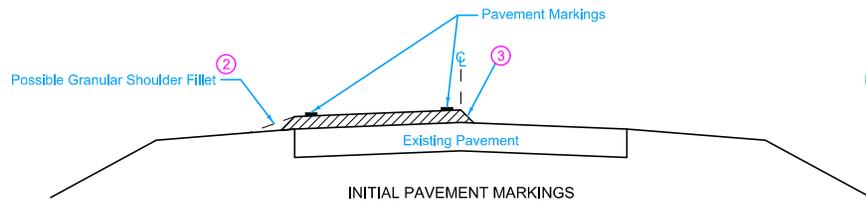
Possible Contract Items:
 Pavement Marking Items
 Traffic Control

Possible Tabulation:
 108-22

LEGEND	
	Direction of Traffic
	Traffic Sign

	REVISION	
	1	10-15-19
STANDARD ROAD PLAN		TC-482
REVISIONS: New Isgo.		SHEET 1 of 2

APPROVED BY DESIGN METHODS ENGINEER	
UNEVEN LANES	

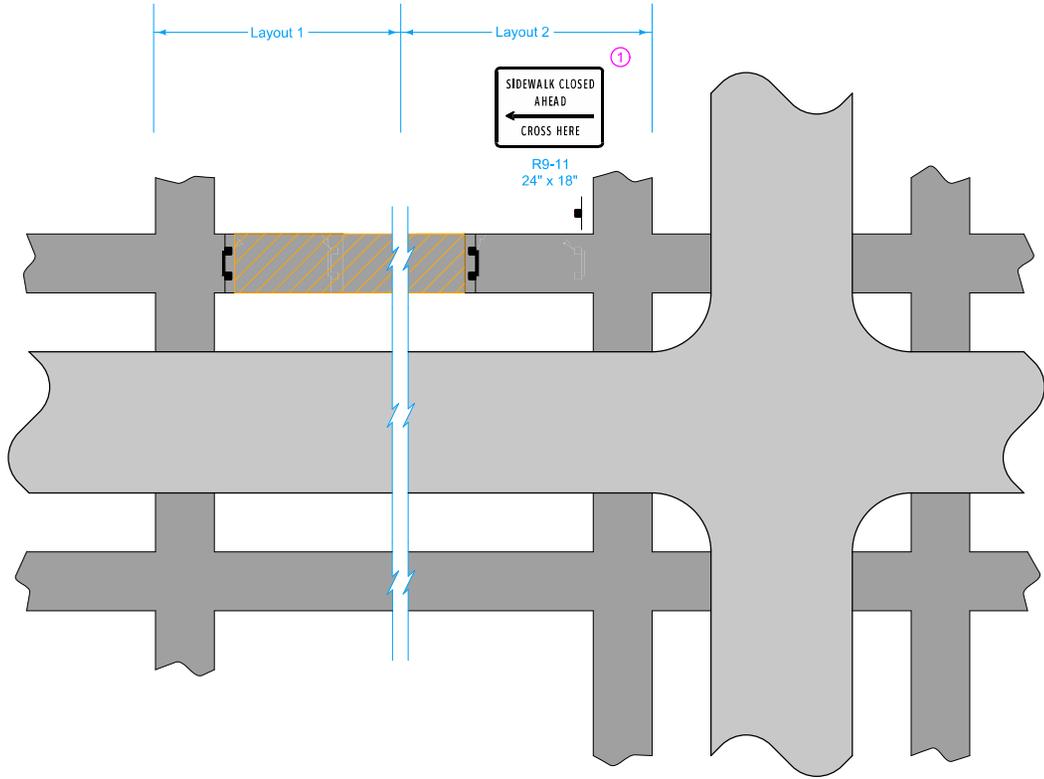


PAVEMENT MARKING SEQUENCE

- ② Shoulder Fillet: Refer to Section 1107 of the Standard Specifications and Safety Edge specifications.
- ③ Centerline fillet may be notched wedge, Safety Edge, or a temporary 3:1 HMA fillet.

LEGEND	
	Surface Course
	Intermediate Course

IOWA DOT	REVISION	
	1	10-15-19
STANDARD ROAD PLAN		TC-482
REVISIONS: New logo.		SHEET 2 of 2
 APPROVED BY DESIGN METHODS ENGINEER		
UNEVEN LANES		



① Omit "SIDEWALK CLOSED AHEAD CROSS HERE" (R9-11) sign when closure is at sidewalk intersection as shown in layout 1.

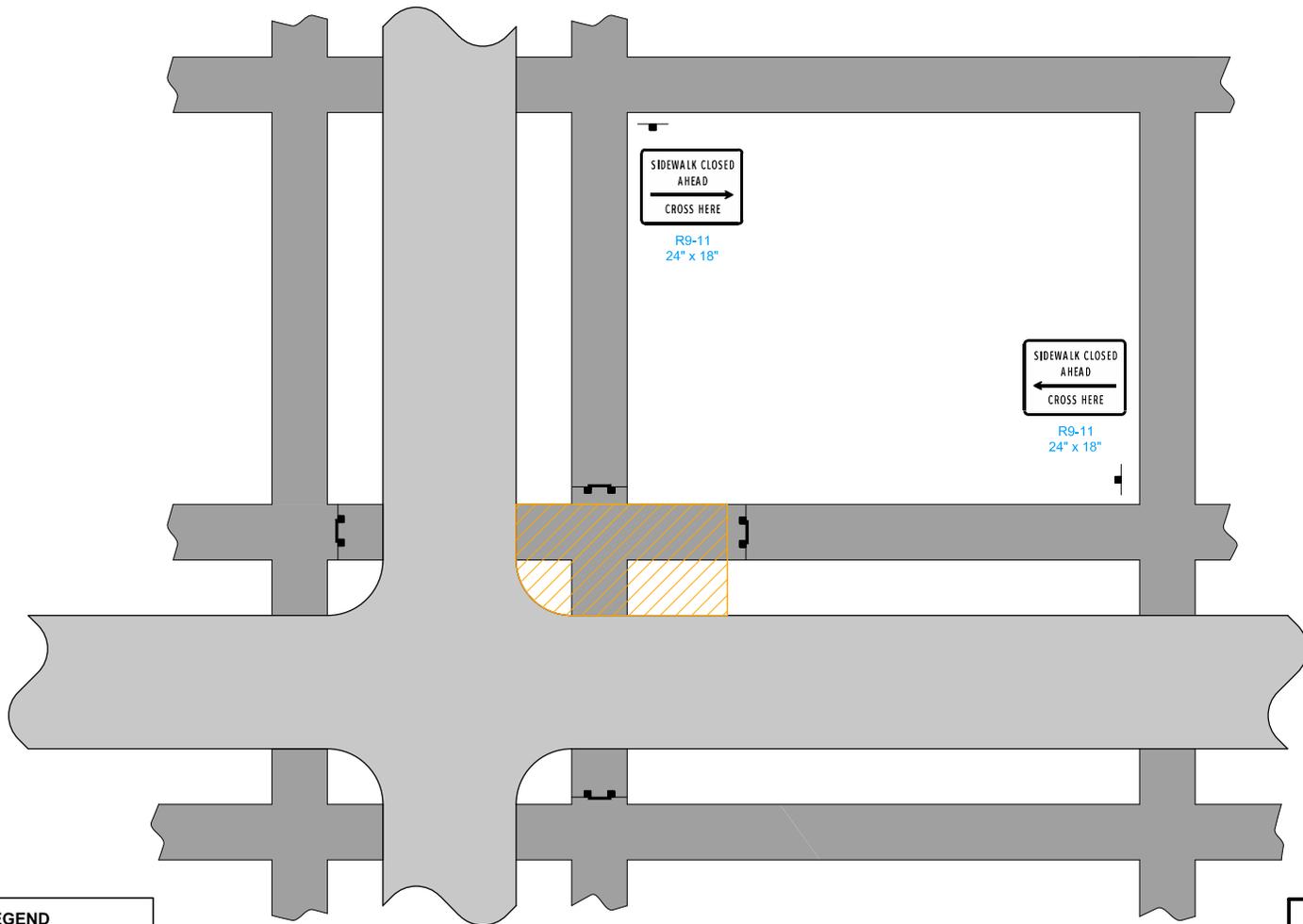
Possible Contract Item:
Traffic Control

Possible Tabulation:
113-2

LEGEND	
	Roadway
	Sidewalk
	Sign
	Pedestrian Path Closure
	Work Area

MID-BLOCK CLOSURE

	REVISION	
	1	10-15-19
STANDARD ROAD PLAN	TC-601	
REVISIONS: New logo.	SHEET 1 of 2	
APPROVED BY DESIGN METHODS ENGINEER		
PEDESTRIAN DETOUR		



SIDEWALK CLOSED
AHEAD
→
CROSS HERE

R9-11
24" x 18"

SIDEWALK CLOSED
AHEAD
←
CROSS HERE

R9-11
24" x 18"

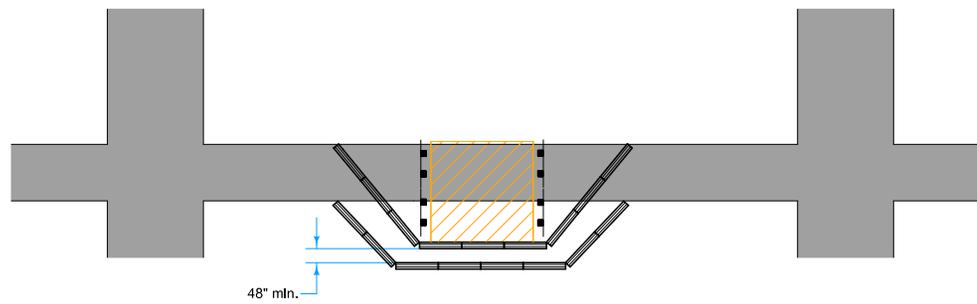
CLOSURE AT INTERSECTION

LEGEND

- Roadway
- Sidewalk
- Sign
- Pedestrian Path Closure
- Work Area

	REVISION
	1 10-15-19
STANDARD ROAD PLAN	TC-601
REVISIONS: New logo.	SHEET 2 of 2
APPROVED BY DESIGN METHODS ENGINEER	
PEDESTRIAN DETOUR	

Acceptable materials and construction method for Pedestrian Channelizer will be defined in the contract documents. When Temporary Barrier Rail is specified as the Pedestrian Channelizer, [Section 2528](#) of the Standard Specifications applies. For other types of Pedestrian Channelizers, the length of Pedestrian Channelizer installed will be measured in feet. Payment will be at the contract price per linear foot.



Possible Contract Items:

- Pedestrian Channelizer
- Temporary Barrier Rail
- Maintenance of Pedestrian Traffic

Possible Tabulation:

113-3

LEGEND	
	Sidewalk
	Direction of Traffic
	Work Area
	Type III Barricade
	Pedestrian Channelizer

	REVISION	
	1	10-15-19
STANDARD ROAD PLAN	TC-602	
REVISIONS: New logo.	SHEET 1 of 1	
 APPROVED BY DESIGN METHODS ENGINEER		
SIDEWALK DIVERSION		