FULL SIZE

- 3.1 Mailbox Turnout in Curb and Gutter Section
- 4.1 PC Concrete Islands and Medians Accessible to the Disabled
- 5.1 Standard Outlet for Curb and Gutter
- 6.1 Precast Reinforced Concrete Flat Slab Top Centered and Offset Manhole 36" Opening
- 11.1 Concrete End Sections for Parallel Pipe Culverts 15" thru 84" Dia.
- 12.1 Concrete End Sections for Parallel Pipe Arch Culverts 15" thru 84" Dia.
- 14.1 Traversable Pipe Grate for Parallel Drainage Structure
- 20.1 Hot-Mix Asphalt Approaches and Mailbox Returns
- 25.1 Entrance Approaches Urban Area
- 26.1 ADA Curb Ramp Pavement Removal And Replacement
- 32.1 Sewer and Water Main Crossings
- 33.1 Concrete Collars for Pipe or Box Culvert Extensions
- 34.1 Work Zone Sign Details
- 35.1 Urban Lane Inside Closure, Multilane, 2W, with Mountable Median
- 36.1 Temporary Road Closure Expressway
- 37.1 Traffic Control for Three Lane Section
- 38.1 Traffic Control for Transition Areas
- 39.1 Traffic Control Typical Weave
- 40.1 Traffic Control for Road Closure
- 41.1 Typical Pavement Markings
- 53.1 Remove and Re-erect Steel Plate Beam Guardrail
- 54.1 Traffic Barrier Terminal, Type 2 (27" height)
- 55.1 Reflectors (Special)
- 68.1 Slotted Drain Pipe (Variable Height)
- 71.1 Detail of Flood Gate
- 72.1 40' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 73.1 50' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 74.1 64' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 75.1 40' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 76.1 50' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 77.1 64' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 78.1 88' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 79.1 40' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 80.1 50' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 81.1 64' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 82.1 40' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 83.1 50' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 84.1 64' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 85.1 88' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 86.1 Beveled Pipe & Guard Detail for Median Crossover
- 90.1 Traffic Barrier Terminal, Type 6B (Special)
- 92.1 Details of Planting and Bracing Trees

District 2 Standards Designer Notes Full Size District 2 Standards

3.1	Use when a mailbox turnout is needed in a curb & gutter section and there isn't a parking lane or a mail delivery lane.
4.1	Use this when there are cross walks that will go through an island or median. Specify which option the contractor is required to use when building the Concrete Median (Special).
5.1	Use this when you need an outlet for curb and gutter, other than type B-6.24
11.1	This is to be used for pipe culverts, Class D under all sideroads.
12.1	This is to be used for EQRS pipe culverts, Class D under all sideroads.
14.1	Use this whenever you use District Standards 10.1, 11.1 & 12.1 and the culvert is within the main line clear zone.
20.1	Include for rural entrances and sideroads on 3R projects, reconstruction projects, or for new entrances. Do not include on 3P or Smart resurfacing projects.
25.1	Include for urban entrances with curb & gutter on 3R projects, reconstruction projects, or for new entrances. Do not include on 3P or Smart resurfacing projects.
26.1	Use this on all projects with ADA curb ramps requiring HMA replacement in front of curb & gutter.
32.1	Include in urban projects with proposed storm sewers or water mains.
33.1	Use this for pipe or box culvert extensions. Fill in the information in the table for the Bill of Materials.
34.1	 Work Zone Sign Details. Include this when you have any of the following: Include in projects where the clear width through a work zone with temporary concrete barrier wall will be 16.0 feet or less. Include when using Traffic Control and Protection Standard 701316 or 701321. Use this in conjunction with the special provision <u>Traffic Control for Narrow Lanes</u> which is under the Traffic Control Plan. Use this on one-lane stage construction jobs when the lane is less than 13'-6" measured from the toe of the barrier wall to the guardrail or bridge wall. Use this when using District Standard 37.1 and 38.1. Use this on low volume entrances that are between the traffic signals on Highway Standard 701316 or 701321. Include this for any milling of the mainline pavement.
35.1	Use this when it is necessary to close the inside lane on an urban project. Also include Highway Standard 701606 and the pay item for 701606.

Use this district standard for any short term closure of an expressway at a

diamond interchange.

36.1

District 2 Standards Designer Notes

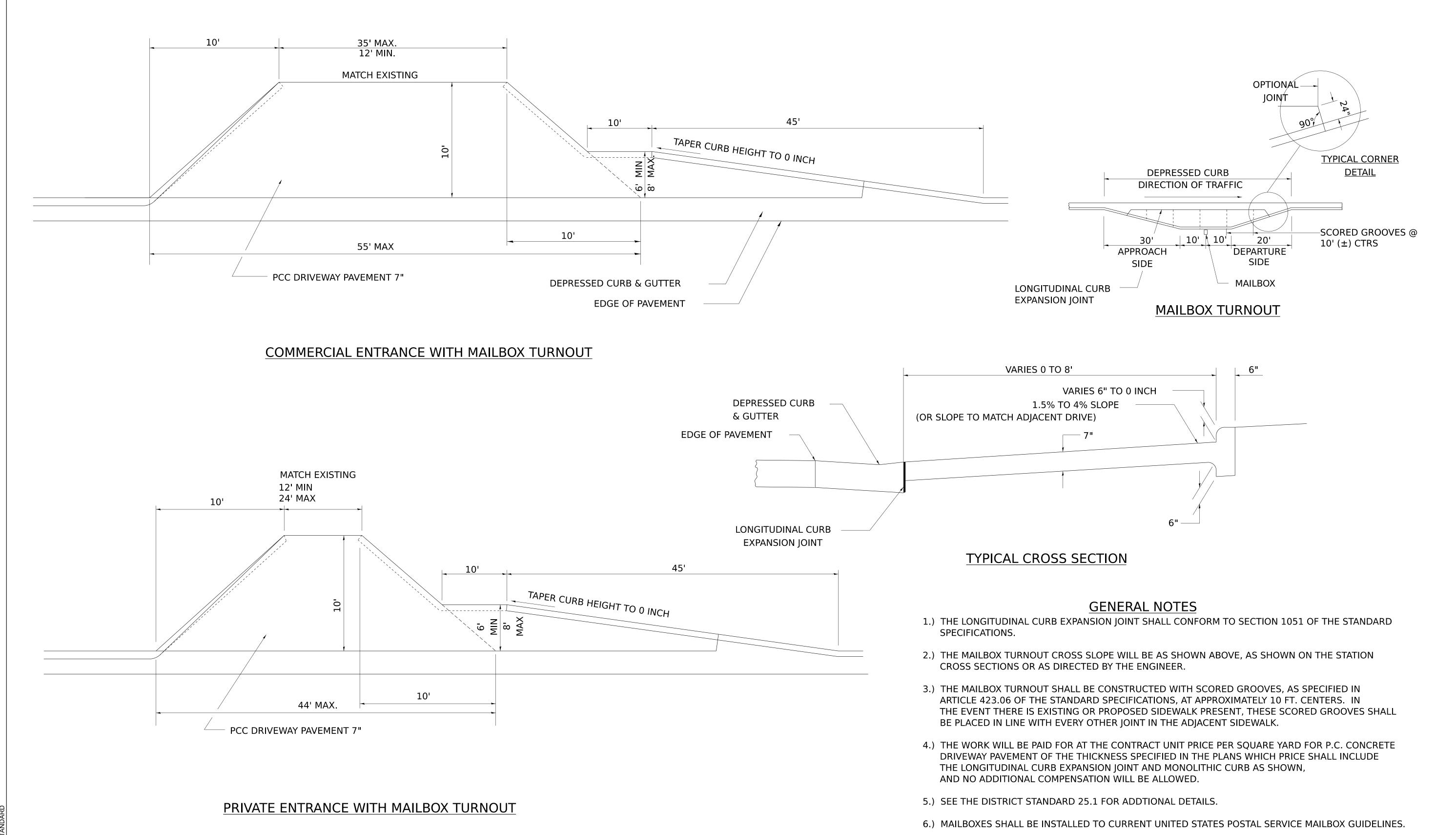
37.1	Use this district standard for work that will require a lane closure in a three lane section such as a truck climbing lane.
38.1	Use this district standard when there is a transition from a four lane section that transitions to a two lane section.
39.1	Include on 4 lane highways where the contractor may change a portion of the work to the opposite lane.
40.1	Include for a mainline road closure.
41.1	Include in projects with pavement marking or raised reflective pavement markers.
53.1	Use this to remove and re-erect an old type steel plate beam guardrail which has 6" block outs and a 27½" rail height.
54.1	Use this when installing a Traffic Barrier Terminal, Type 2 on the old type of steel plate beam guardrail with a $27\frac{1}{2}$ " rail height.
55.1	This will be used on all projects with guardrail, permanent barrier wall and bridge structures. Use pay items: - X7820007 Guardrail Reflectors, Type C (Special) - X7820008 Barrier Wall Reflectors (Special) - X6350110 Delineators (Special) (<u>Do not</u> use the pay items Guardrail Reflectors Type A & B or Barrier Wall Reflectors Type B & C)
68.1	This can be used to increase drainage in curb & gutter with very flat grades (less than 0.3%). Also include this when constructing median crossovers.
71.1	Use if a property owner has a fenced field with livestock and a stream or river. The flood gate will be placed near the right-of-way to prevent livestock from leaving the field through the waterway. During high water, the flood gate will open to let water and debris through.
72.1, 73.1, 74.1, 75.1, 76.1, 77.1, 78.1	Use on single lane median crossovers of the median width specified and for the work zone speed limit. Include District Standard 86.1. If there are overlays on the existing PCC pavement, installing tie bars into the existing PCC pavement will not work. Talk to the Construction Field Engineer or your Project Engineer for more information.
79.1, 80.1, 81.1, 82.1, 83.1, 84.1, 85.1	Use on two lane median crossovers of the median width specified and for the work zone speed limit. Include District Standard 86.1. If there are overlays on the existing PCC pavement, installing tie bars into the existing PCC pavement will not work. Talk to the Construction Field Engineer or your Project Engineer for more information.
90.1	Use this on 4-lane highways that go under dual structures and the piers required shielding. The outside of the piers are shielded with impact attenuators. The gap between the piers is shielded using Traffic Barrier Terminal Type 6B (Special). The Traffic Barrier Terminal Type 6B (Special) is

District 2 Standards Designer Notes required on both sides of the piers.

Design Note: The <u>length</u> of the double thrie beam between the piers <u>must be added on the elevation on the District Standard</u>.

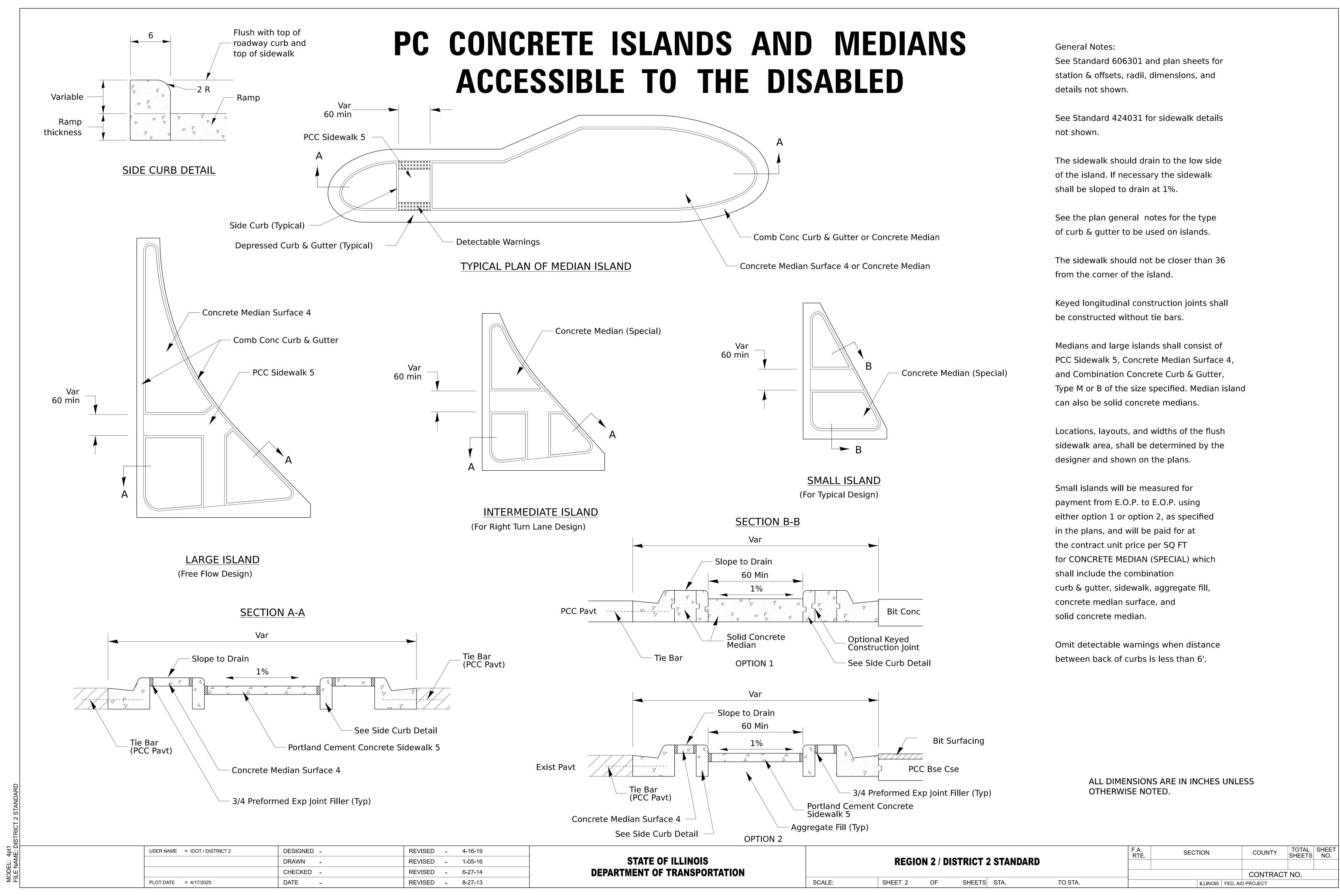
92.1 Include when planting new ball & burlapped trees.

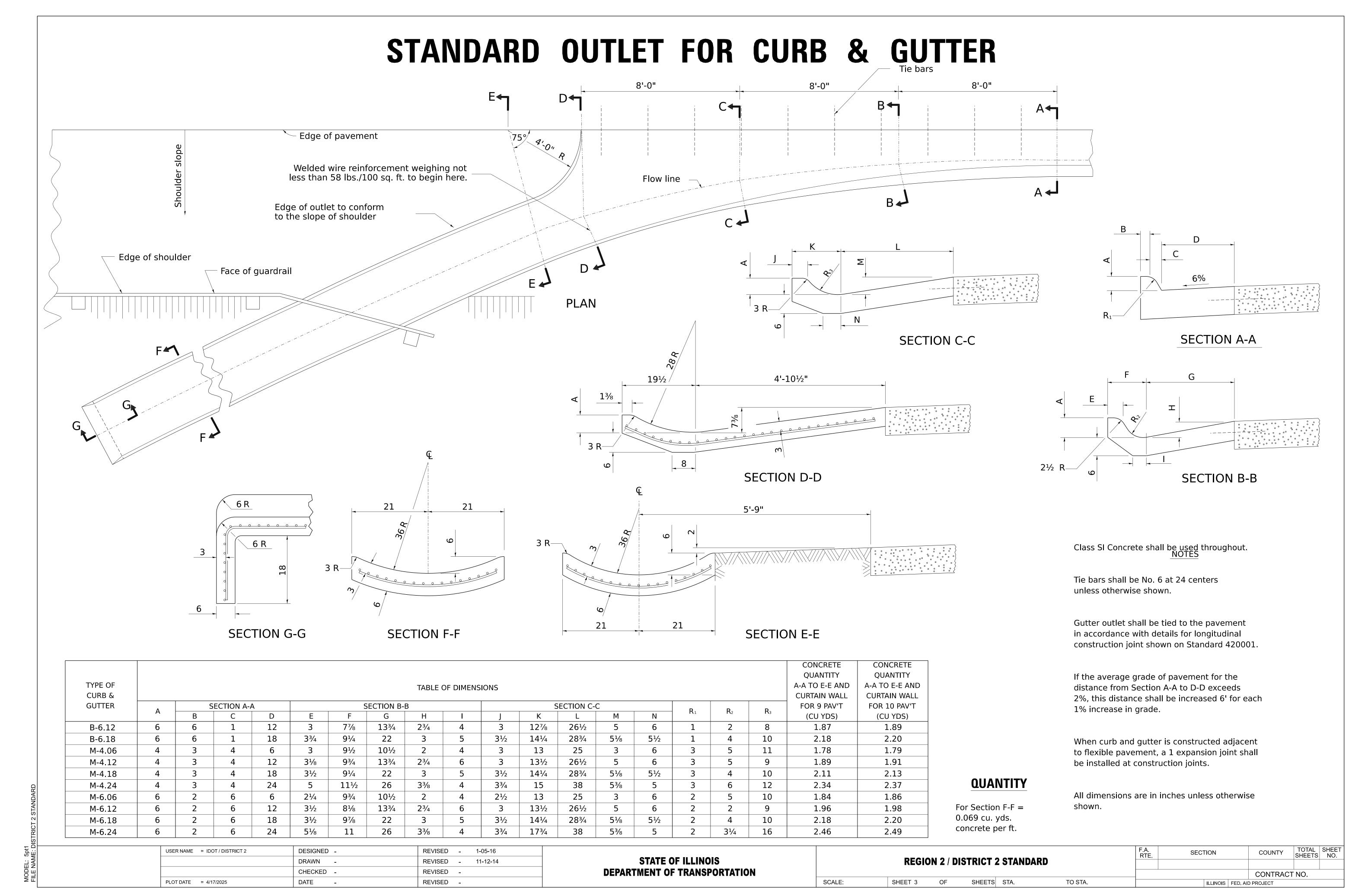
MAILBOX TURNOUT IN CURB AND GUTTER SECTION



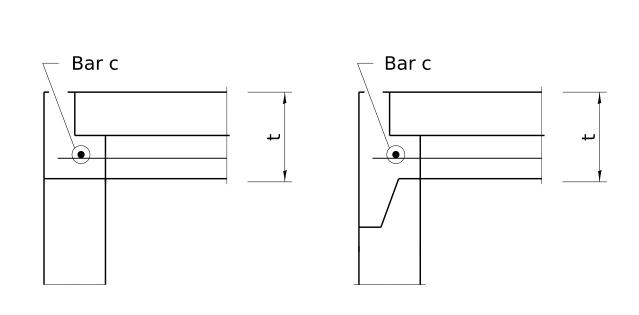
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-10-19							F.A. RTF	SECTION	COUNTY TOTAL SHEET
	DRAWN -	REVISED - 1-03-18	STATE OF ILLINOIS		REGIO	ON 2 / DI	ISTRICT 2 STANDA	ARD	1112.		51,221,0 11,01
	CHECKED -	REVISED - 10-17-11	DEPARTMENT OF TRANSPORTATION								CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 1	OF	SHEETS STA.	TO STA.		ILLINOIS FE	D. AID PROJECT



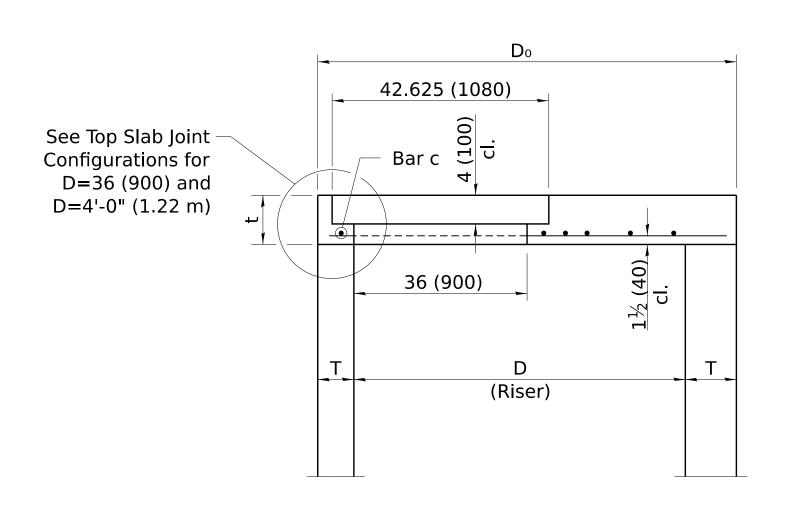


PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE - 36" OPENING

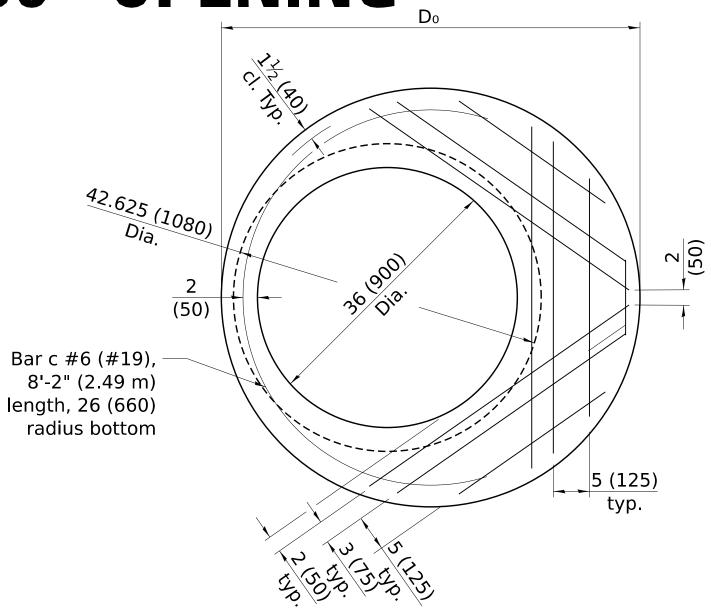


FLAT SLAB TOP JOINT CONFIGURATIONS FOR D = 4'-0'' (1.22 m) THRU D = 6'-0'' (1.83 m)

(Shown at access hole)

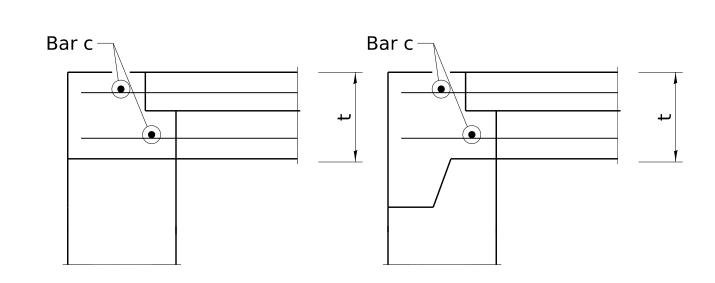


SECTION THRU FLAT SLAB TOP FOR D = 4'-0'' (1.22 m) THRU D = 6'-0'' (1.83 m)



PLAN - FLAT SLAB TOP FOR D = 4'-0'' (1.22 m)

(Showing layout of bottom reinforcement bars and c bars)



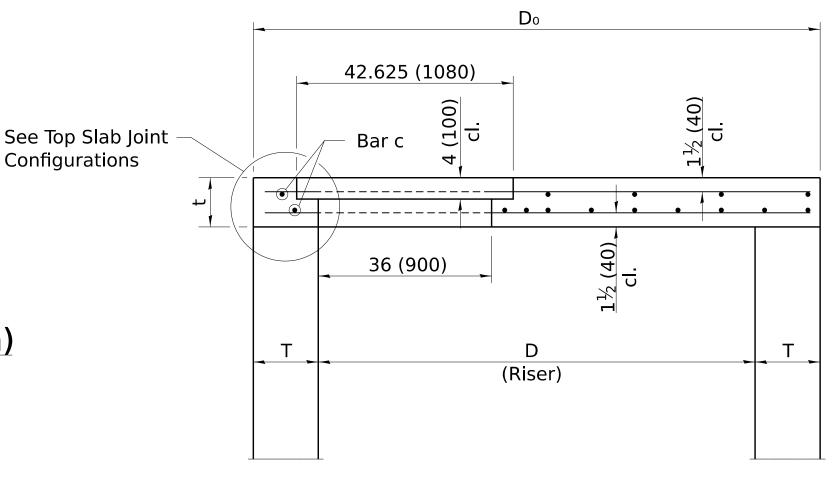
FLAT SLAB TOP JOINT CONFIGURATIONS FOR D = 7'-0" (2.13 m) THRU D = 10'-0" (3.05 m)

4'-0"

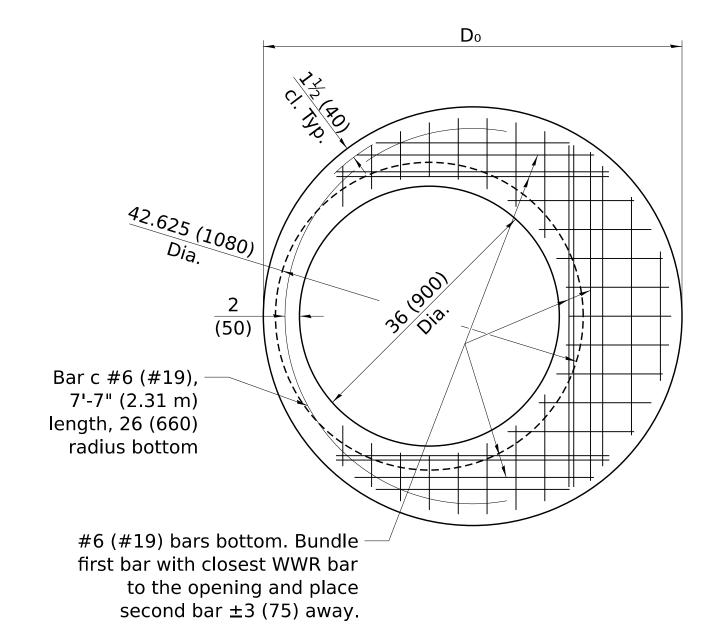
10'-0"

(3.1 m)

(Shown at access hole)



SECTION THRU FLAT SLAB TOP FOR D = 7'-0'' (2.13 m) THRU D = 10'-0'' (3.05 m)



PLAN - FLAT SLAB TOP FOR D = 4'-0'' (1.22 m) (Showing layout of welded wire reinforcement and c bars)

(225)9.5 (238)10

(1.2 m)5'-0" (1.5 m) (1.8 m) (265) 10.5 (265)(2.4 m) 12 9'-0" (305)(2.7 m)

TABLE

FLAT SLAB TOP REINFORCEMENT FOR D = 4'-0 (1.22 m)

Location	WWR (each	n direction)		Rebar			
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	See plan view for rebar orientation			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			

GENERAL NOTES

The flat slab top may be used in lieu of the tapered tops shown on Standards 602001, 602016, or 602306 at the option of the Contractor or when field conditions prohibit the use of tapered tops.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

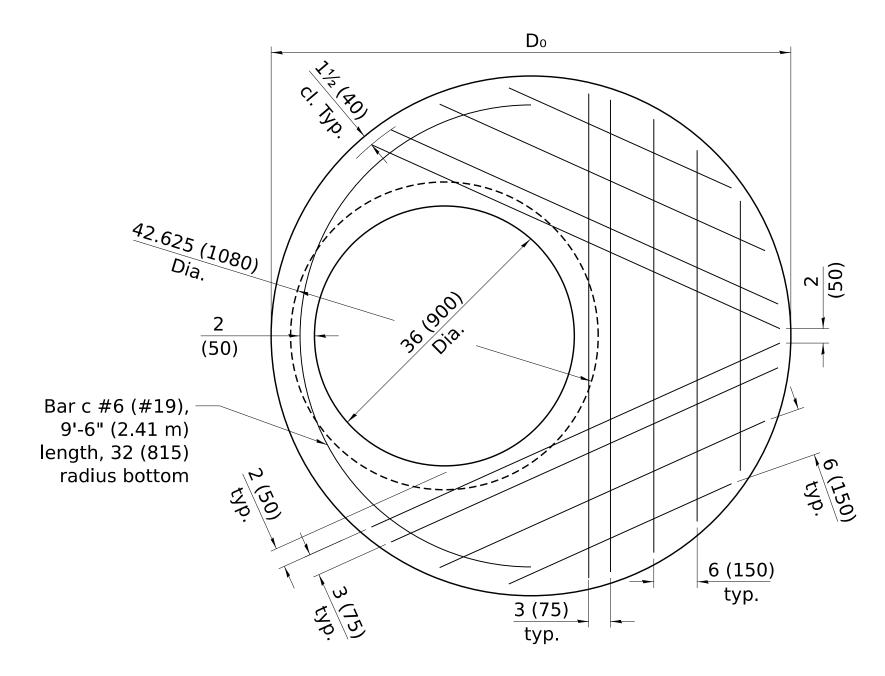
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-3-25	ı
	DRAWN -	REVISED - 3-23-23	ı
	CHECKED -	REVISED -	ı
PLOT DATE = 4/17/2025	DATE -	REVISED -	

13 (330)

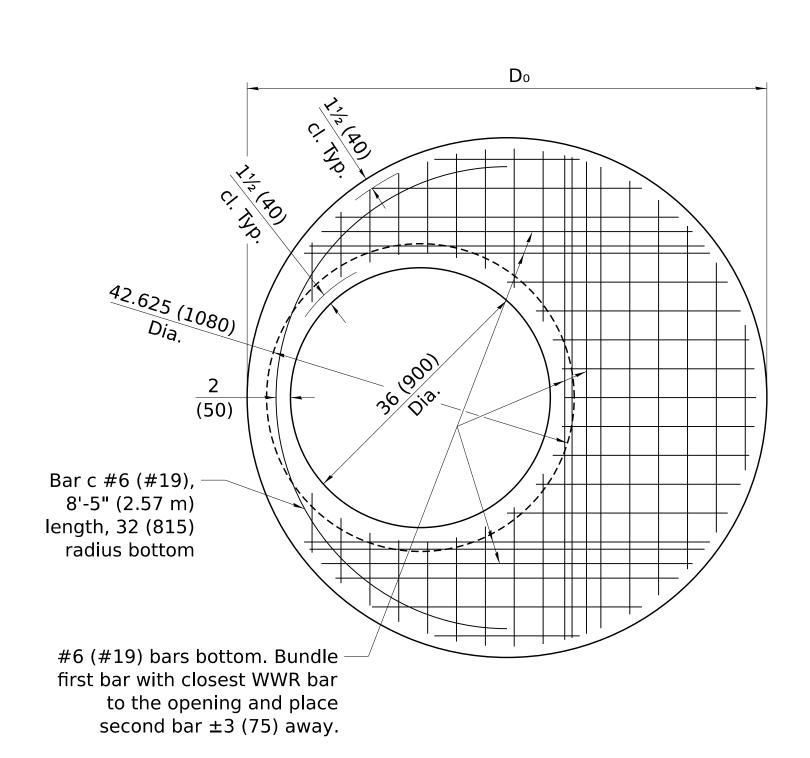
STATE OF ILLINOIS		DECL	M 2 / DI	CTDICT 2 CTANDA	DD	F.A. RTE.	SEC	TION	COUNTY	TOTAL SHEETS	SHE
STATE OF ILLINOIS		KEGIC	JN Z / DI	STRICT 2 STANDA	RU						
DEPARTMENT OF TRANSPORTATION									CONTRAC	T NO.	
	SCALE [.]	SHEET 4	OF	SHEETS STA.	TO STA			ILLINOIS FED AL	D PRO IECT		

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE - 36" OPENING



PLAN - FLAT SLAB TOP FOR D = 5'-0" (1.52 m)

(Showing layout of bottom reinforcement bars and c bars)



PLAN - FLAT SLAB TOP FOR D = 5'-0" (1.52 m)

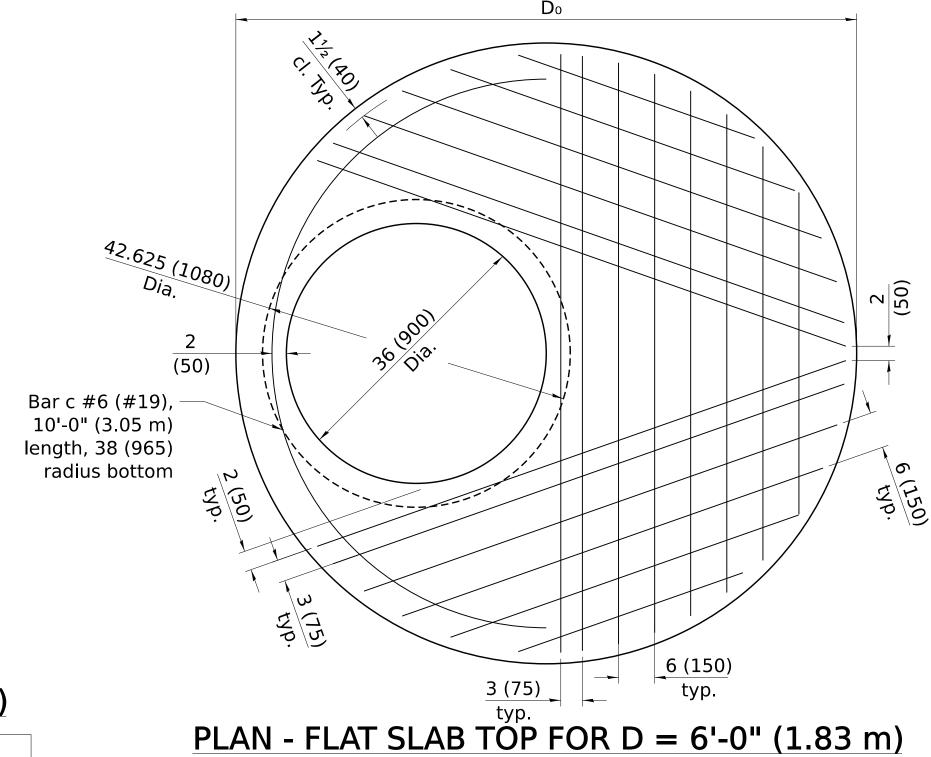
(Showing layout of welded wire bottom reinforcement and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 5'-0" (1.52 m)

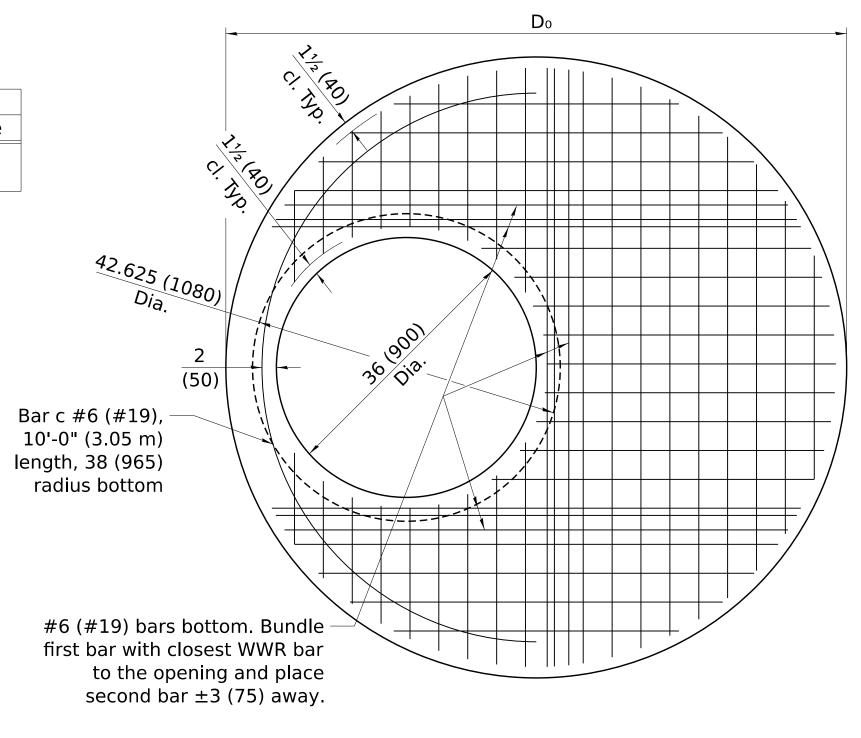
Locatio	WWR (each	n direction)	Rebar				
Locatio	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Botton	* 0.88 sq. in./ft.	6	See plan view fo	or rebar orientation	#6		
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			

FLAT SLAB TOP REINFORCEMENT FOR D = 6'-0'' (1.83 m)

Location	WWR (each	direction)	Rebar				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	See plan view for rebar orientation			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			



(Showing layout of bottom reinforcement bars and c bars)



PLAN - FLAT SLAB TOP FOR D = 6'-0'' (1.83 m)

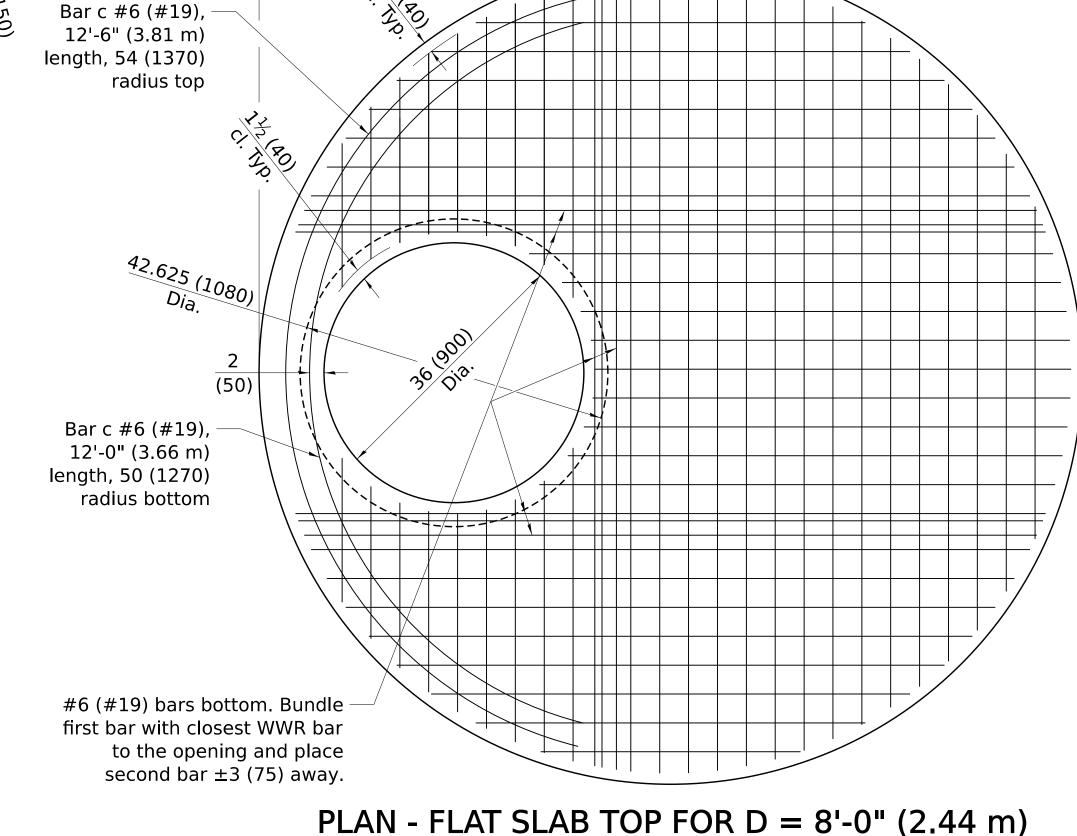
(Showing layout of welded wire bottom reinforcement and c bars)

All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-3-25			F.A. RTF	SECTION	COUNTY TOTAL SHEET	
	DRAWN -	REVISED - 3-23-23	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	1812.		STILL TO THE
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 5 OF SHEETS STA. TO STA.		ILLINOIS FE	D. AID PROJECT

Bar c #6 (#19), 11'-6" (2.92 m) length, 48 (1220) radius top (50) typ (50) Bar c #6 (#19) 11'-0" (2.79 m) length, 44 (1120) radius bottom PLAN - FLAT SLAB TOP FOR D = 7'-0'' (2.13 m) (Showing layout of reinforcement bars and c bars) Bar c #6 (#19), 11'-6" (2.92 m) length, 48 (1220) radius top 42.625 (1080) (50) Bar c #6 (#19),

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE - 36" OPENING



Bar c #6 (#19), 12'-6" (3.81 m) length, 54 (1370) radius top 42.625 (1080) (50) typ. 6 (150) typ. Bar c #6 (#19), 12'-0" (3.66 m) length, 50 (1270) radius bottom

PLAN - FLAT SLAB TOP FOR D = 8'-0'' (2.44 m)

(Showing layout of reinforcement bars and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 7'-0'' (2.13 m)

Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(450) (233 sq. mm/m)		(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	#6			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	and spacing and this table for bar size			

^{*} Only one layer of WWR permitted to avoid congestion.

FLAT SLAB TOP REINFORCEMENT FOR D = 8'-0'' (2.44 m)

Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	#6			
Mat	(1863 sq. mm/m)	•					

PLAN - FLAT SLAB TOP FOR D = 7'-0'' (2.13 m)

11'-0" (2.79 m)

radius bottom

length, 44 (1120)

#6 (#19) bars bottom Bundle first bar with

closest WWR bar to the

opening and place second bar ± 3 (75)

(Showing layout of reinforcement bars and c bars)

DESIGNED USER NAME = IDOT / DISTRICT 2 REVISED 4-3-25 DRAWN 3-23-23 REVISED REVISED CHECKED -PLOT DATE = 4/17/2025 DATE REVISED

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

All dimensions are in inches (millimeters) unless otherwise shown.

(Showing layout of welded wire reinforcement and c bars)

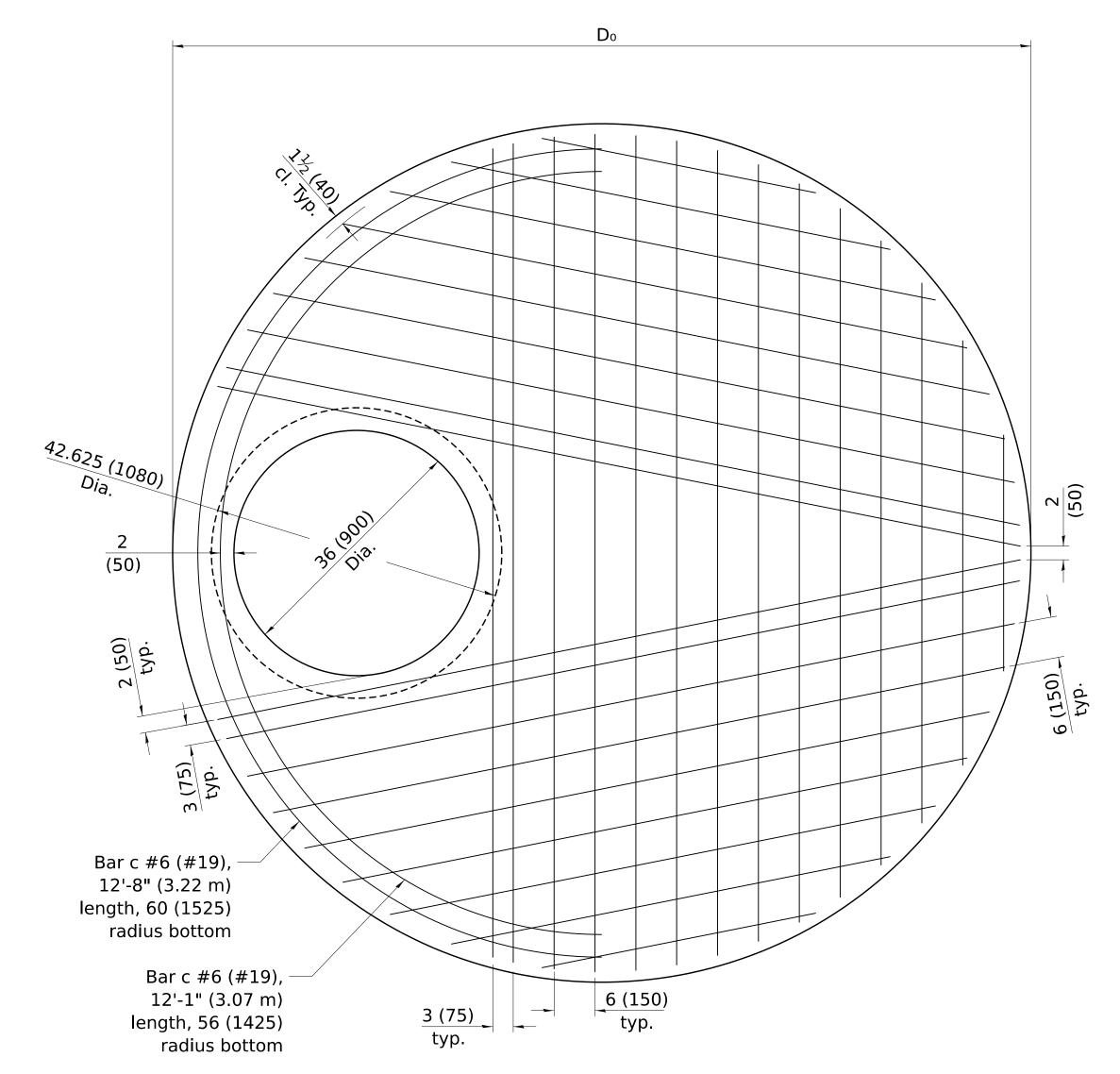
SECTION REGION 2 / DISTRICT 2 STANDARD SCALE: SHEETS STA. TO STA. SHEET 6 ILLINOIS FED. AID PROJECT

TOTAL SHEET SHEETS NO.

COUNTY

CONTRACT NO.

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE – 36" OPENING



PLAN - FLAT SLAB TOP FOR D = 9'-0'' (2.74 m)

(Showing layout of reinforcement bars and c bars)

#6 (#19) bars bottom. Bundle first bar with closest WWR bar to the opening and place second bar ±3 (75) away.

Bar c #6 (#19), 12'-8" (3.22 m) length, 60 (1525) radius bottom

PLAN - FLAT SLAB TOP FOR D = 9'-0'' (2.74 m)

(Showing layout of welded wire reinforcement and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 9'-0" (2.74 m)

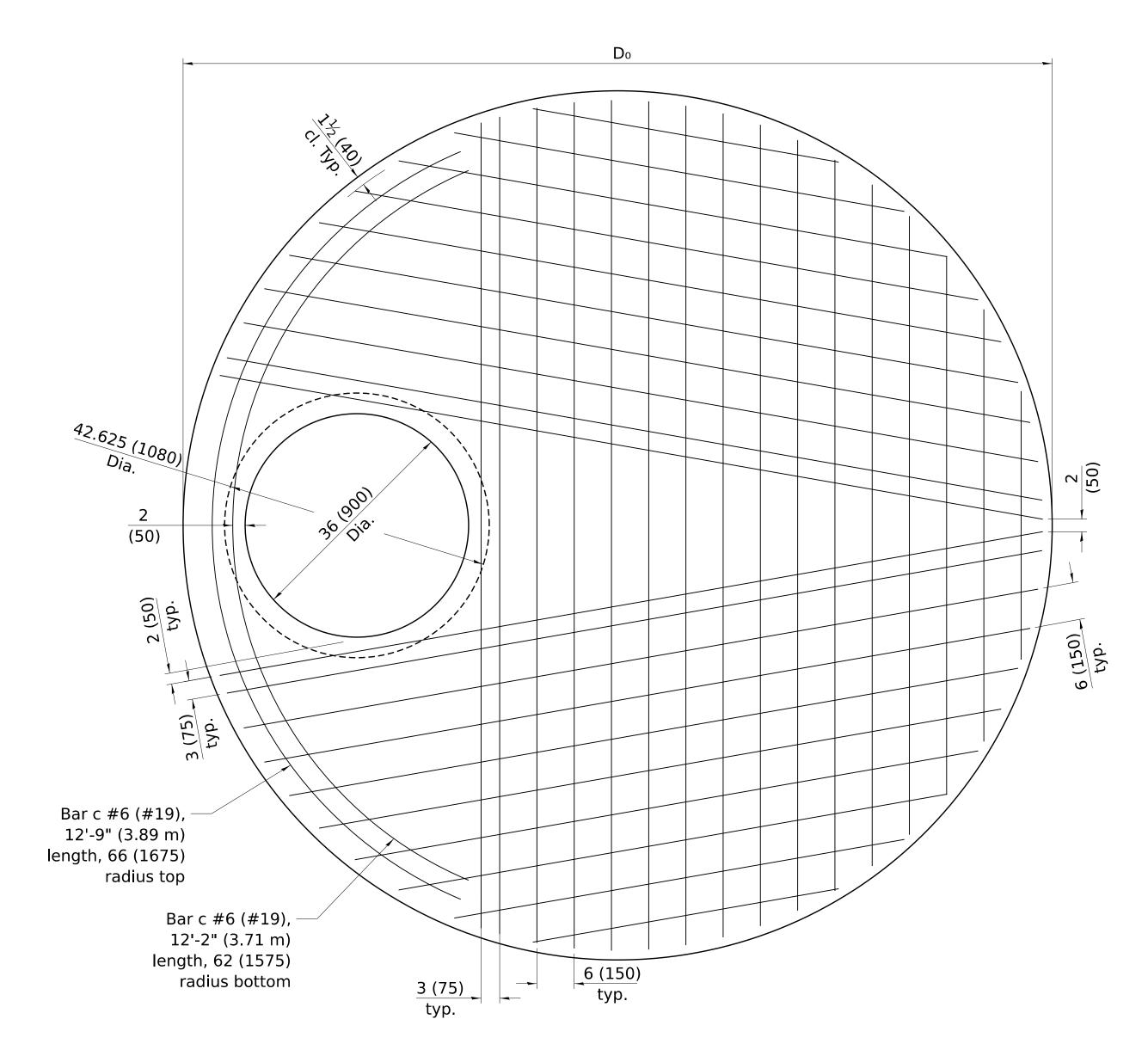
Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	#6			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			

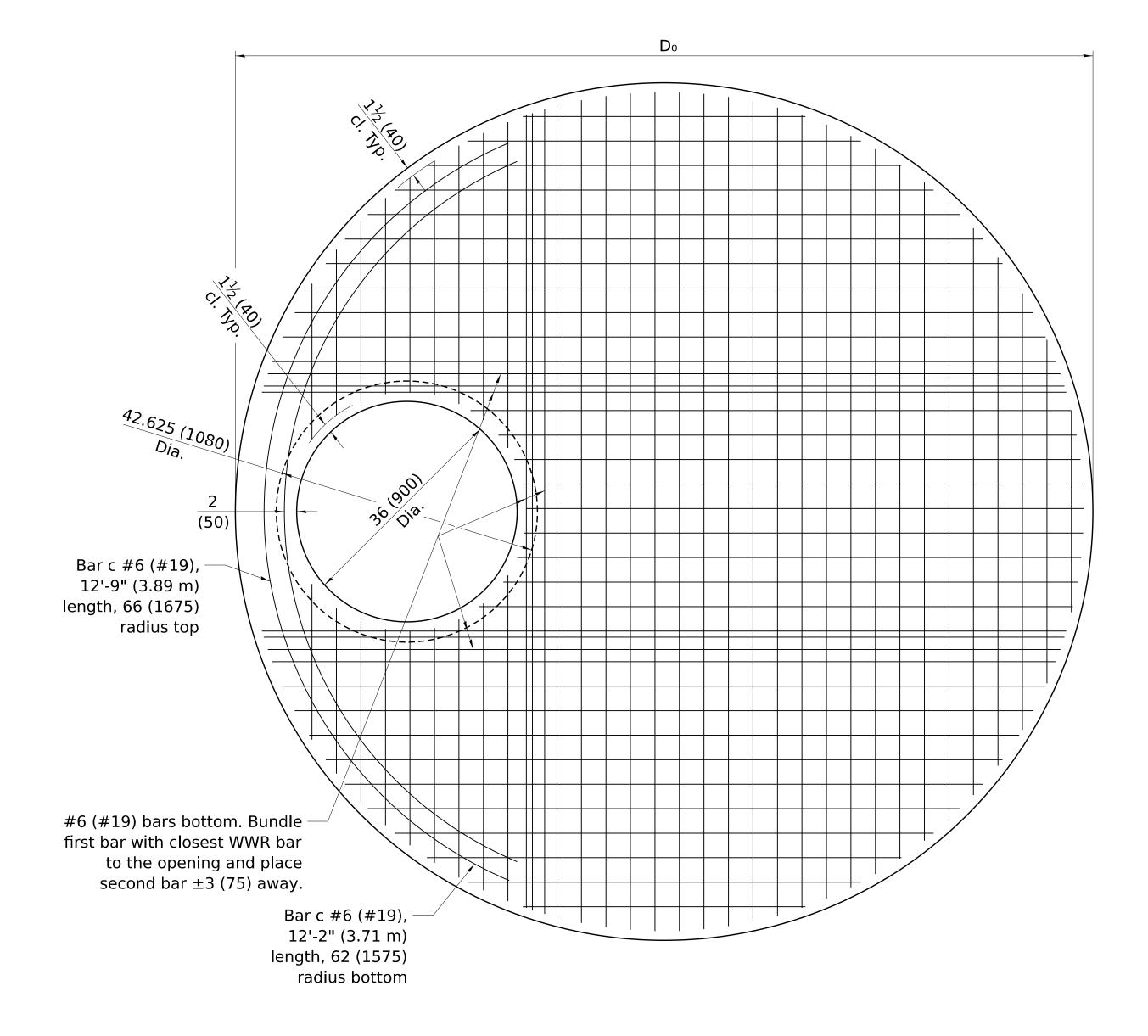
^{*} Only one layer of WWR permitted to avoid congestion.

All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-3-25								F.A. RTF	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED - 3-23-23	STATE OF ILLINOIS		REGIO	ON 2 / DI	STRICT :	2 STANDAR	RD	1112.			OTTEL TO
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRACT	ΓNO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 7	OF	SHEETS	STA.	TO STA.		ILLINOIS FEE	D. AID PROJECT	

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE – 36" OPENING





PLAN - FLAT SLAB TOP FOR D = 10'-0'' (3.05 m)

(Showing layout of reinforcement bars and c bars)

PLAN - FLAT SLAB TOP FOR D = 10'-0'' (3.05 m)

(Showing layout of welded wire reinforcement and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 10'-0'' (3.05 m)

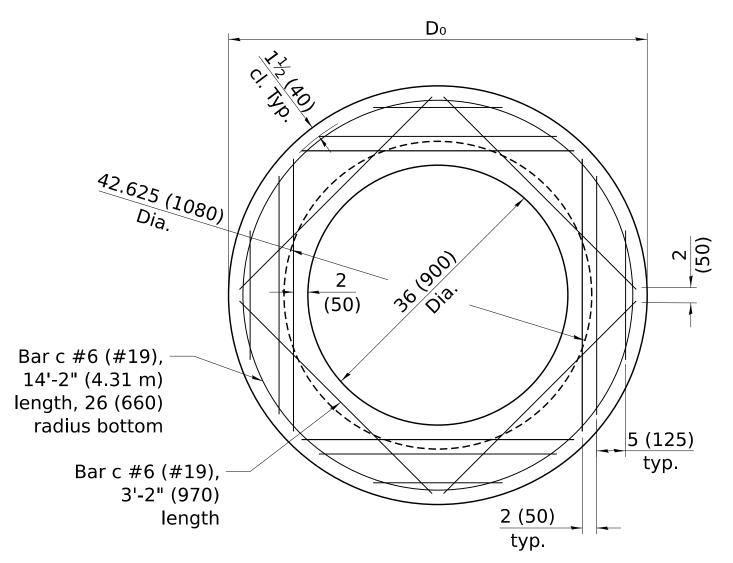
Location	WWR (each	n direction)	Rebar (each direction except as noted)					
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size			
Тор	0.11 sq. in./ft. 18		0.11 sq. in./ft.	18	#4			
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)			
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)				

^{*} Only one layer of WWR permitted to avoid congestion.

All dimensions are in inches (millimeters) unless otherwise shown.

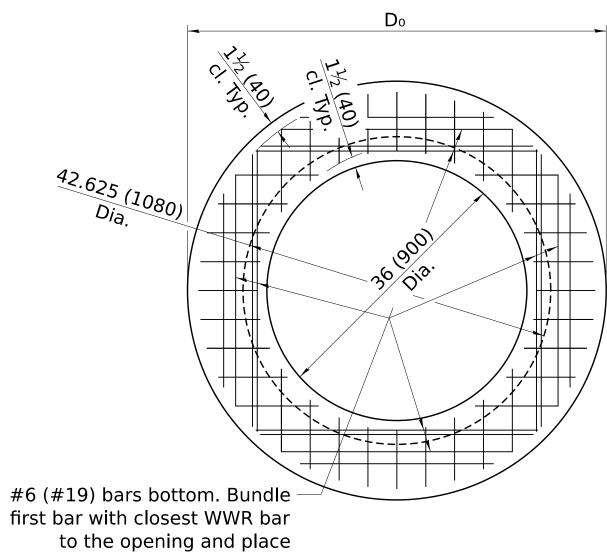
AME: D	USER NAME = IDOT / DISTRICT 2	DESIGNED - DRAWN -	REVISED - 4-3-25 REVISED - 3-23-23	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	F.A. RTE.	SECTION	COUNTY TOTAL SHEET NO.
		CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		REGION 27 DIGITALS I GIANDANS			CONTRACT NO.
·	PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 8 OF SHEETS STA. TO STA.		ILLINOIS F	ED. AID PROJECT

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE - 36" OPENING



PLAN - FLAT SLAB TOP FOR D = 4'-0'' (1.22 m)

(Showing layout of bottom reinforcement bars and c bars)



second bar ± 3 (75) away.

PLAN - FLAT SLAB TOP FOR D = 4'-0'' (1.22 m)

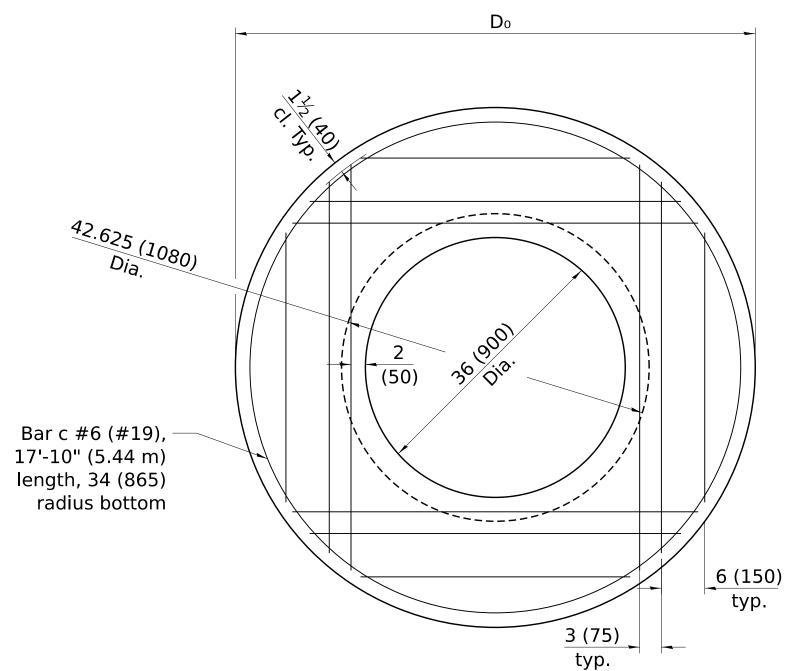
(Showing layout of bottom welded wire reinforcement and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 4'-0 (1.22 m)

	Location	WWR (each	n direction)			
	Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size
•	Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6
	Mat	(1863 sq. mm/m)	(150)	and spacing and t	his table for bar size	(#19)

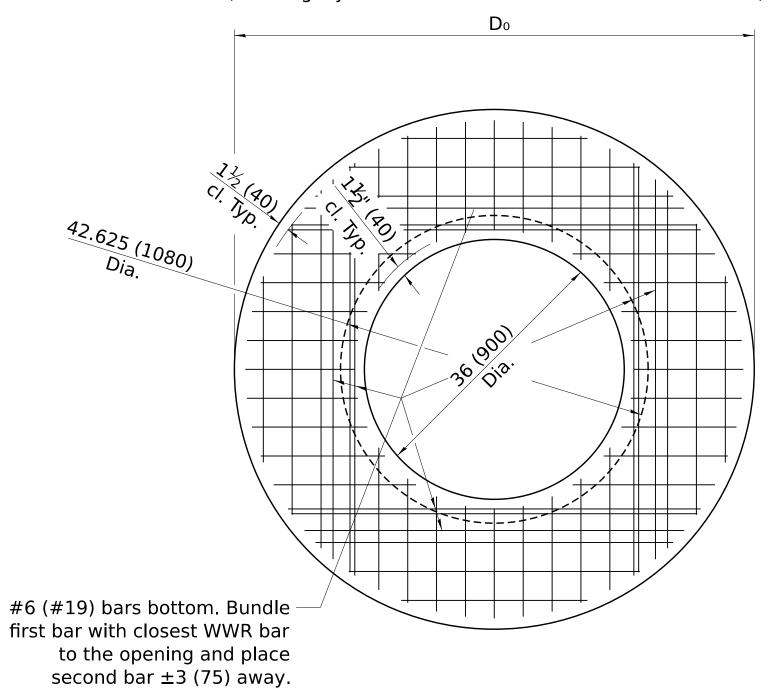
FLAT SLAB TOP REINFORCEMENT FOR D = 5'-0'' (1.52 m)

Location	WWR (each	n direction)	Rebar				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	view for rebar orientation			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	his table for bar size	(#19)		



PLAN - FLAT SLAB TOP FOR D = 5'-0" (1.52 m)

(Showing layout of bottom reinforcement bars and c bars)

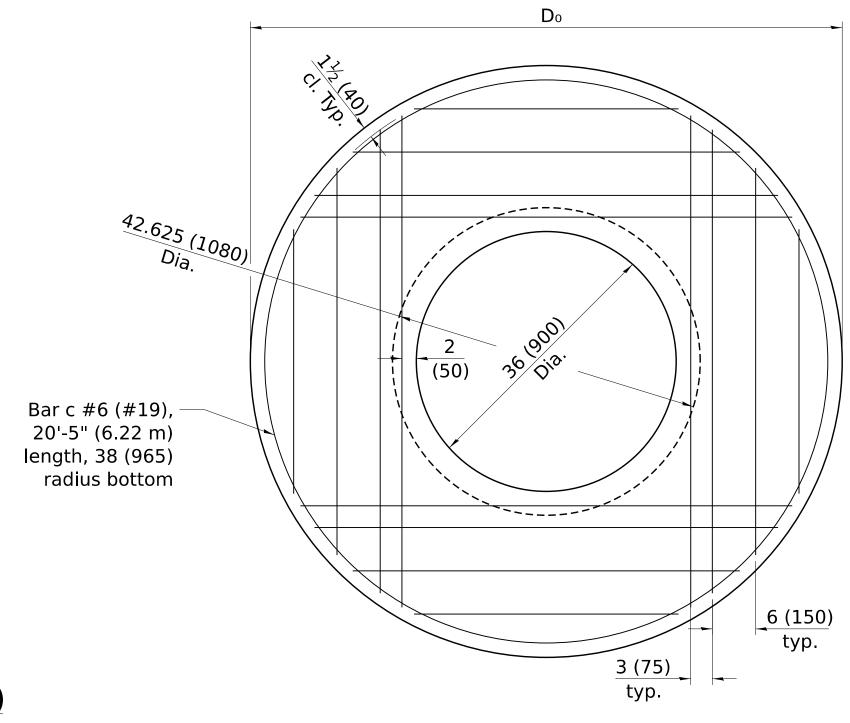


PLAN - FLAT SLAB TOP FOR D = 5'-0" (1.52 m)

(Showing layout of bottom welded wire reinforcement and c bars)

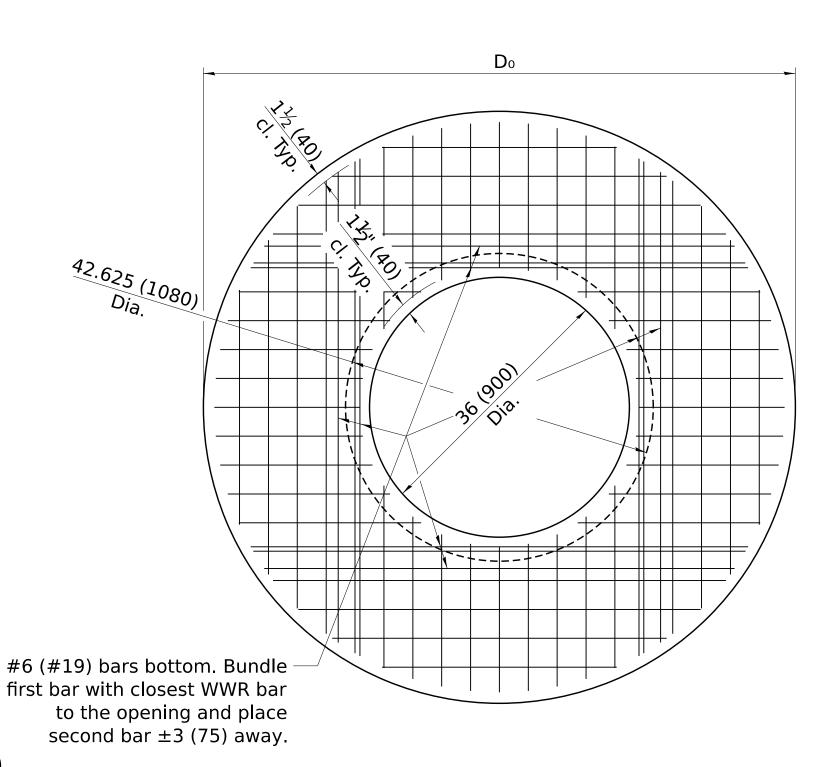
FLAT SLAB TOP REINFORCEMENT FOR D = 6'-0'' (1.83 m)

Location	WWR (each	n direction)	Rebar				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6		
Mat	(1863 sq. mm/m)	(150)	and spacing and t	his table for bar size	(#19)		



PLAN - FLAT SLAB TOP FOR D = 6'-0" (1.83 m)

(Showing layout of bottom reinforcement bars and c bars)



PLAN - FLAT SLAB TOP FOR D = 6'-0'' (1.83 m)

(Showing layout of bottom welded wire reinforcement and c bars)

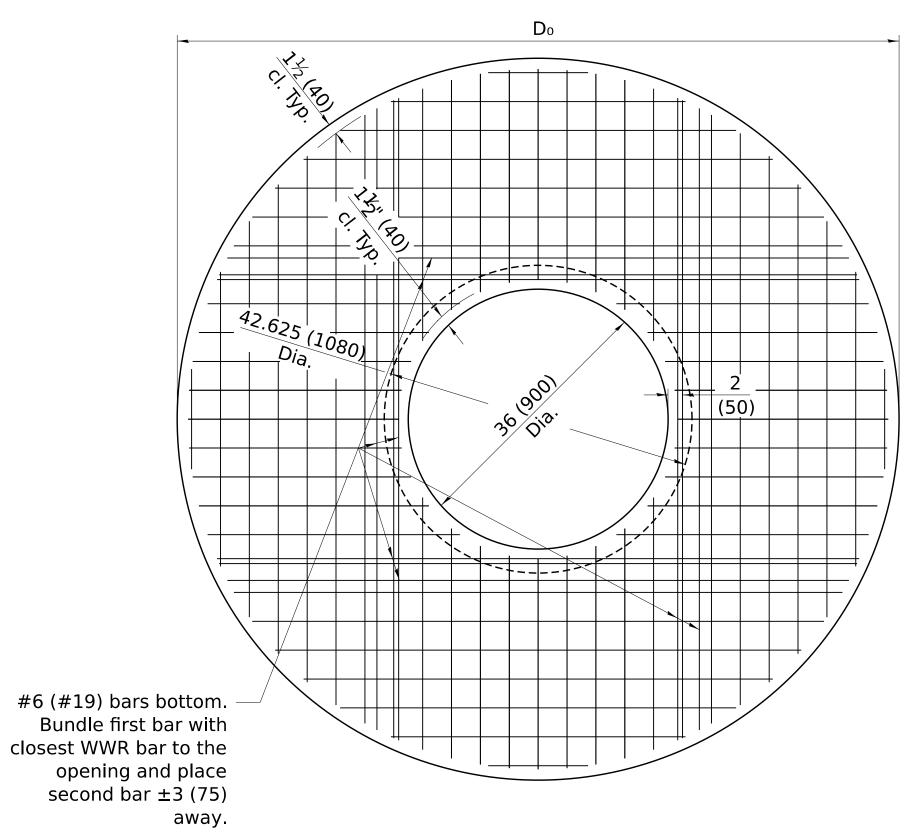
All dimensions are in inches (millimeters) unless otherwise shown.

4-3-25 DESIGNED REVISED USER NAME = IDOT / DISTRICT 2 STATE OF ILLINOIS **REGION 2 / DISTRICT 2 STANDARD** 3-23-23 DRAWN REVISED REVISED **DEPARTMENT OF TRANSPORTATION** CHECKED -CONTRACT NO. PLOT DATE = 4/17/2025 DATE REVISED SHEETS STA. TO STA. SCALE: SHEET 9 ILLINOIS FED. AID PROJECT

CENTERED AND OFFSET MANHOLE - 36" OPENING Bar c #6 (#19), 25'-2" (7.67 m) 6 (150) length, 48 (1.22 m) typ. radius top and bottom

PLAN - FLAT SLAB TOP FOR D = 7'-0'' (2.13 m)

(Showing layout of reinforcement bars and c bars)

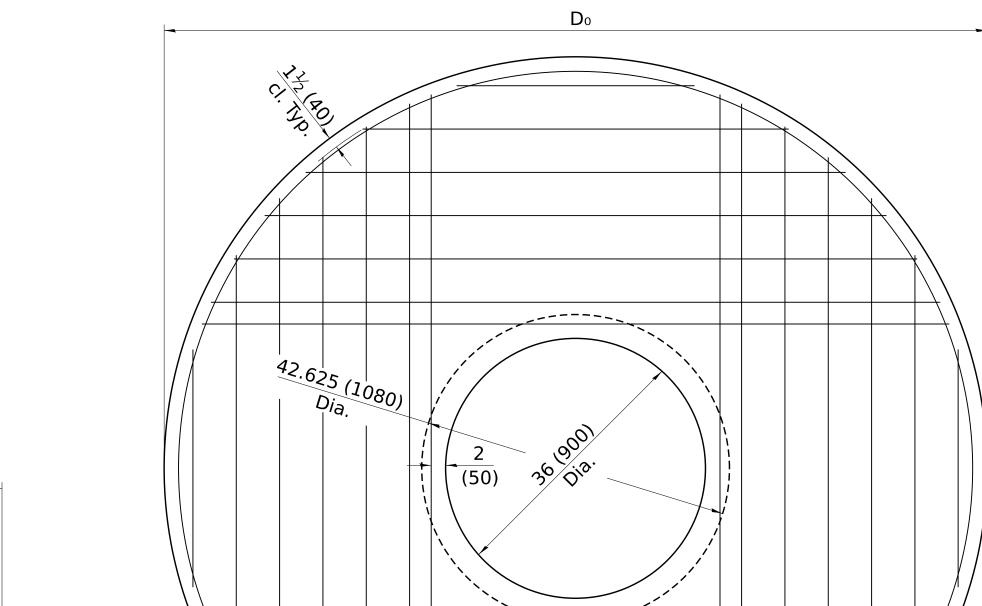


#6 (#19) bars bottom. Bundle first bar with closest WWR bar to the opening and place second bar ± 3 (75) away.

PRECAST REINFORCED CONCRETE FLAT SLAB TOP

PLAN - FLAT SLAB TOP FOR D = 8'-0" (2.44 m)

(Showing layout of welded wire reinforcement and c bars)



PLAN - FLAT SLAB TOP FOR D = 8'-0" (2.44 m)

6 (150)

(Showing layout of reinforcement bars and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 7'-0'' (2.13 m)

Location	WWR (eacl	n direction)	Rebar (each direction except as noted)					
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size			
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4			
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)			
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6			
Mat	(1863 sq. mm/m)	(150)	and spacing and t	his table for bar size	(#19)			

^{*} Only one layer of WWR permitted to avoid congestion.

PLAN - FLAT SLAB TOP FOR D = 7'-0'' (2.13 m)

(Showing layout of welded wire reinforcement and c bars)

DESIGNED -REVISED USER NAME = IDOT / DISTRICT 2 4-3-25 DRAWN REVISED - 3-23-23 CHECKED -REVISED PLOT DATE = 4/17/2025 DATE REVISED -

All dimensions are in inches (millimeters) unless otherwise shown.

FLAT SLAB TOP REINFORCEMENT FOR D = 8'-0'' (2.44 m)

Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6		
Mat	(1863 sq. mm/m)	(150)	and spacing and this table for bar size		(#19)		

* Only one layer of WWR permitted to avoid congestion.

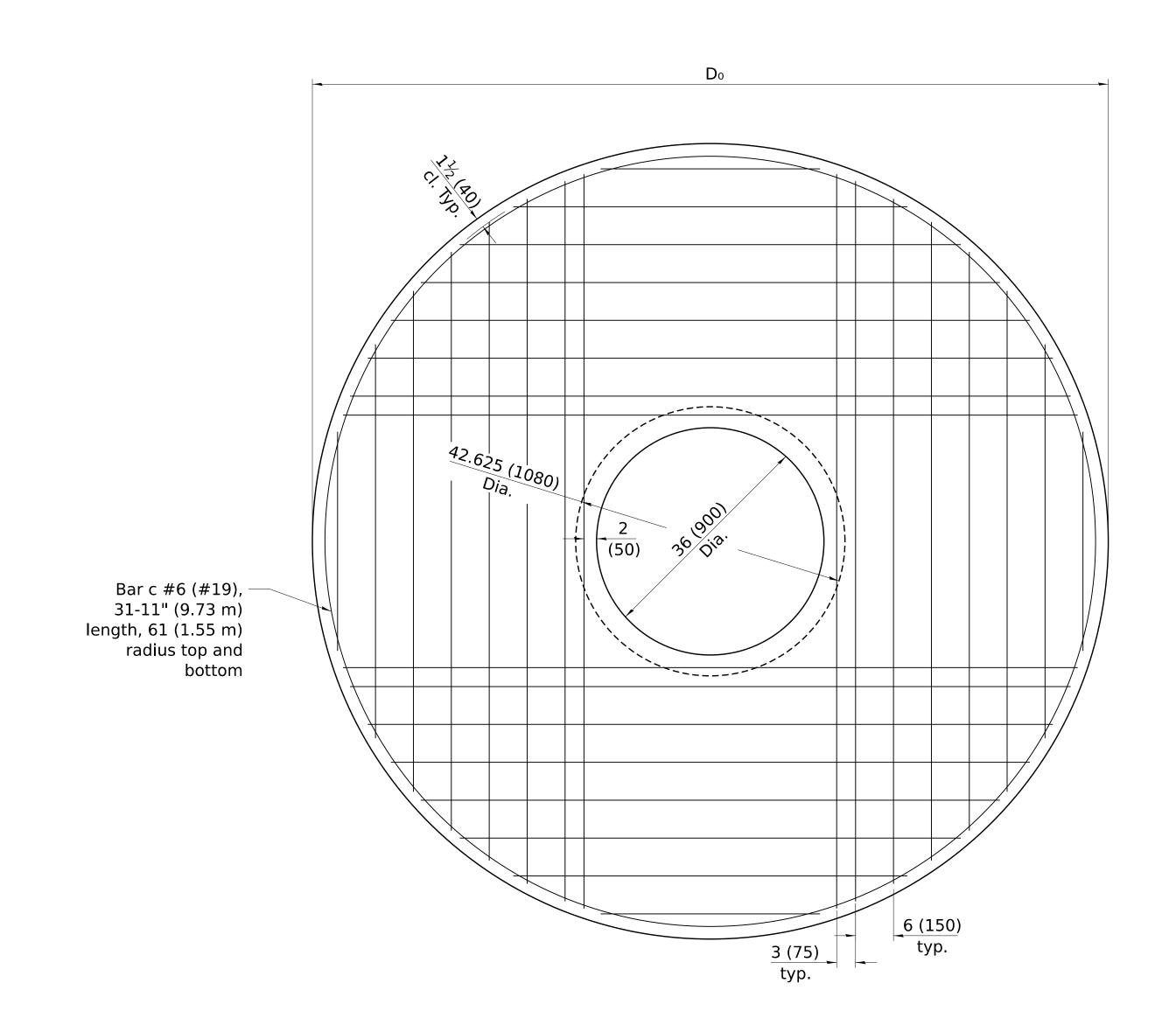
STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD					SECTION	COUNTY	TOTAL SHEET NO.
DEPARTMENT OF TRANSPORTATION								CONTRAC	ΓNO.
	SCALE:	SHEET 10	OF	SHEETS STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	

Bar c #6 (#19),

26'-9" (8.14 m)

length, 51 (1.30 m) radius top and bottom

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE - 36" OPENING



#6 (#19) bars bottom. Bundle first bar with closest WWR bar to the opening and place second bar ±3 (75) away.

PLAN - FLAT SLAB TOP FOR D = 9'-0'' (2.74 m)

(Showing layout of reinforcement bars and c bars)

PLAN - FLAT SLAB TOP FOR D = 9'-0'' (2.74 m)

(Showing layout of welded wire reinforcement and c bars)

FLAT SLAB TOP REINFORCEMENT FOR D = 9'-0'' (2.74 m)

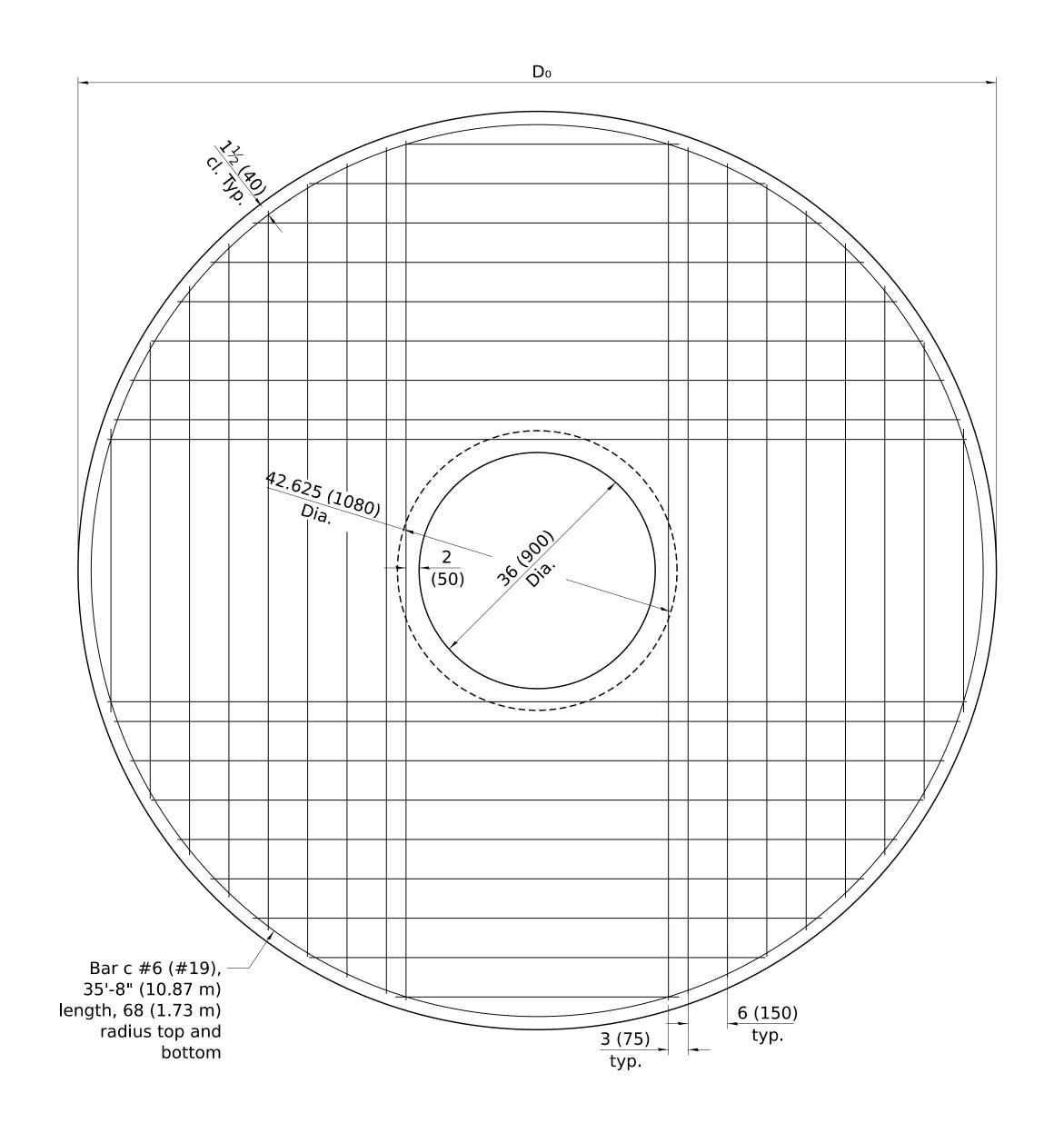
Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6		
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			

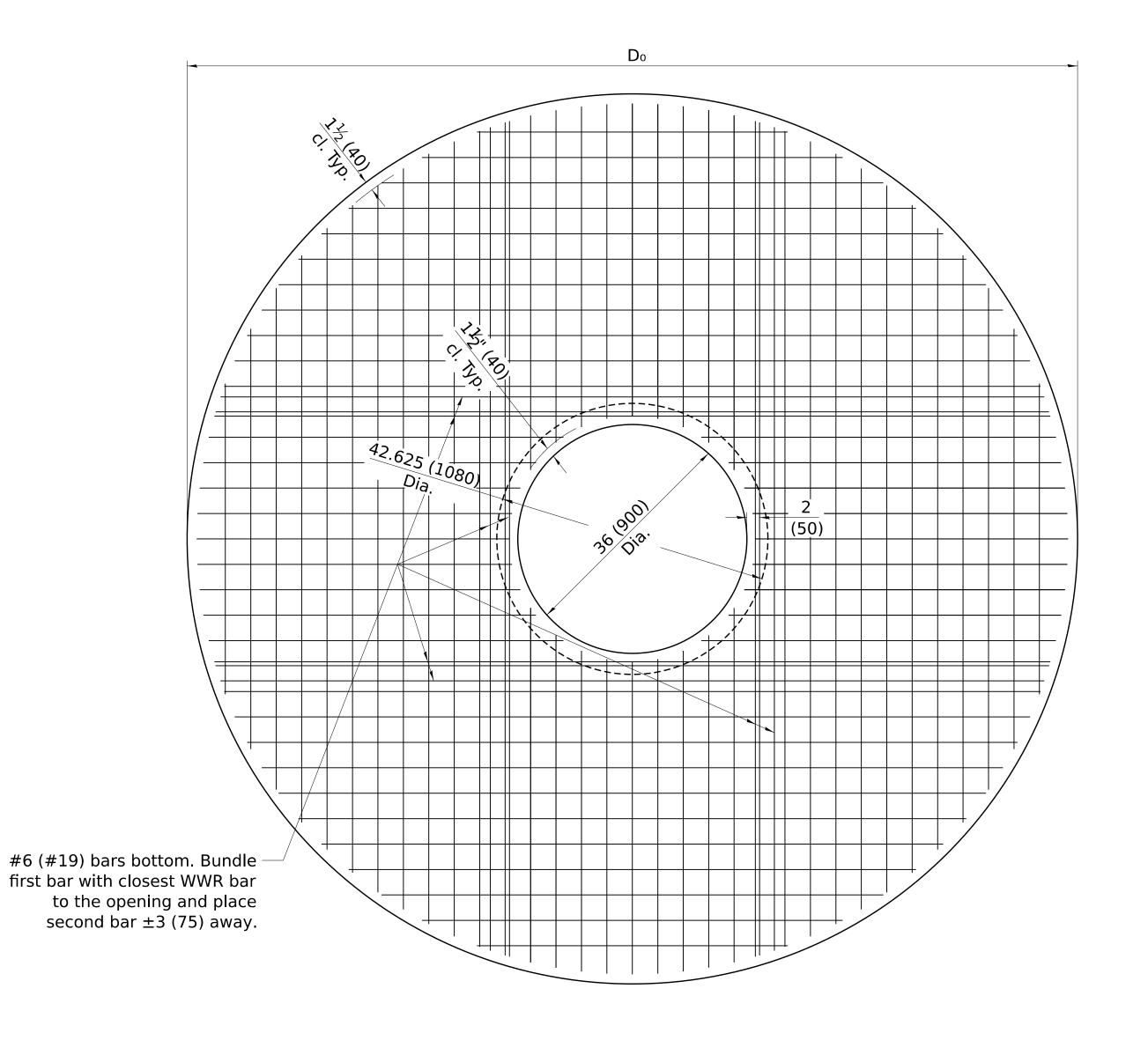
^{*} Only one layer of WWR permitted to avoid congestion.

All dimensions are in inches (millimeters) unless otherwise shown.

6pt1_ IE: DI	USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-3-25				F.A. RTF	SECTION	COUNTY TOTAL SHEET
NAN NAN		DRAWN -	REVISED - 3-23-23	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	1112.		51.2216 1161
		CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
≥ ፲	PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 11 OF SHEETS STA. TO STA.		ILLINOIS FED. AID F	PROJECT

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE — 36" OPENING





PLAN - FLAT SLAB TOP FOR D = 10'-0" (3.05 m)

(Showing layout of reinforcement bars and c bars)

PLAN - FLAT SLAB TOP FOR D = 10'-0" (3.05 m)

(Showing layout of welded wire reinforcement and c bars)

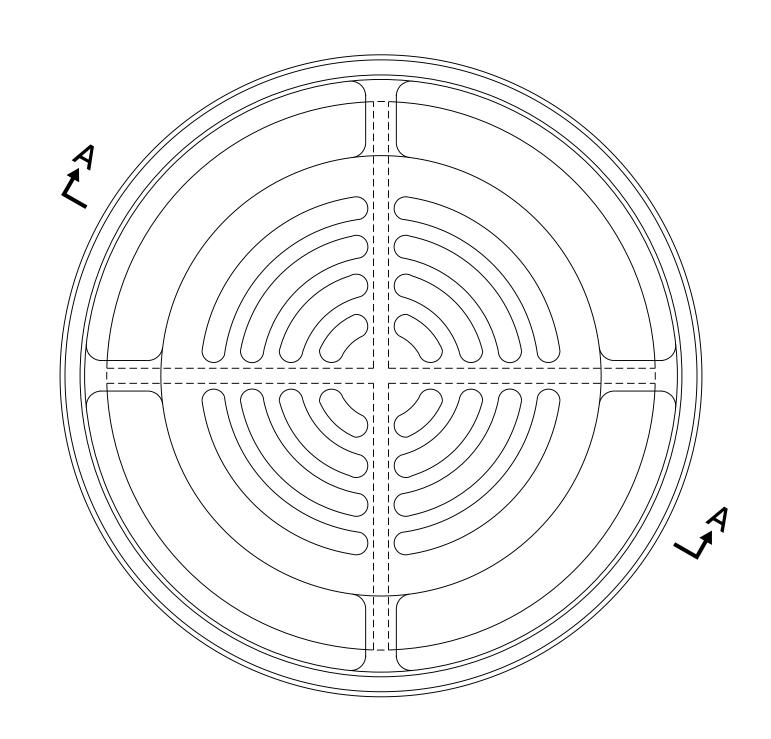
FLAT SLAB TOP REINFORCEMENT FOR D = 10'-0'' (3.05 m)

Location	WWR (each	n direction)	Rebar (each direction except as noted)				
Location	A _S (min.)	Spacing (max.)	A _S (min.)	Spacing (max.)	Bar Size		
Тор	0.11 sq. in./ft.	18	0.11 sq. in./ft.	18	#4		
Mat	(233 sq. mm/m)	(450)	(233 sq. mm/m)	(450)	(#13)		
Bottom	* 0.88 sq. in./ft.	6	See plan view fo	r rebar orientation	#6		
Mat	(1863 sq. mm/m)	(150)	and spacing and t	(#19)			

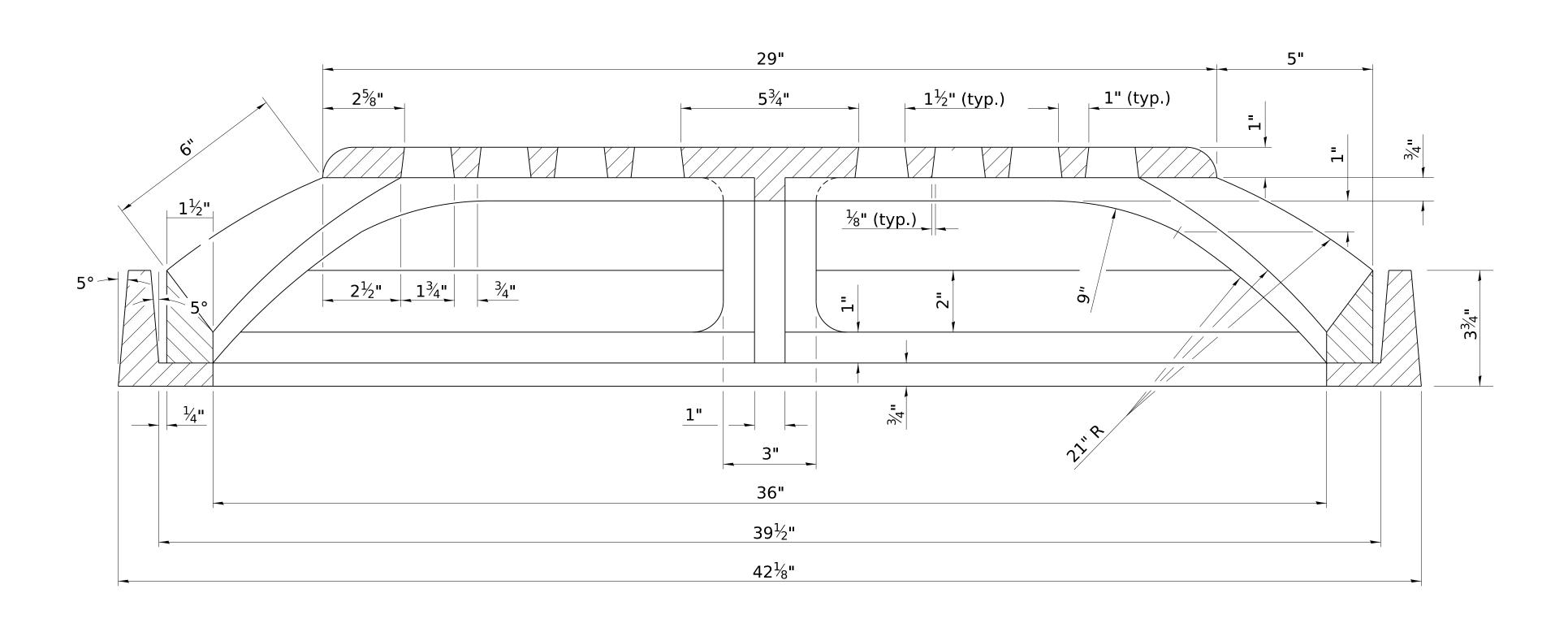
^{*} Only one layer of WWR permitted to avoid congestion.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-3-25				F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	DRAWN -	REVISED - 3-23-23	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD				
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT N	NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 12 OF SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT	

PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE – 36" OPENING



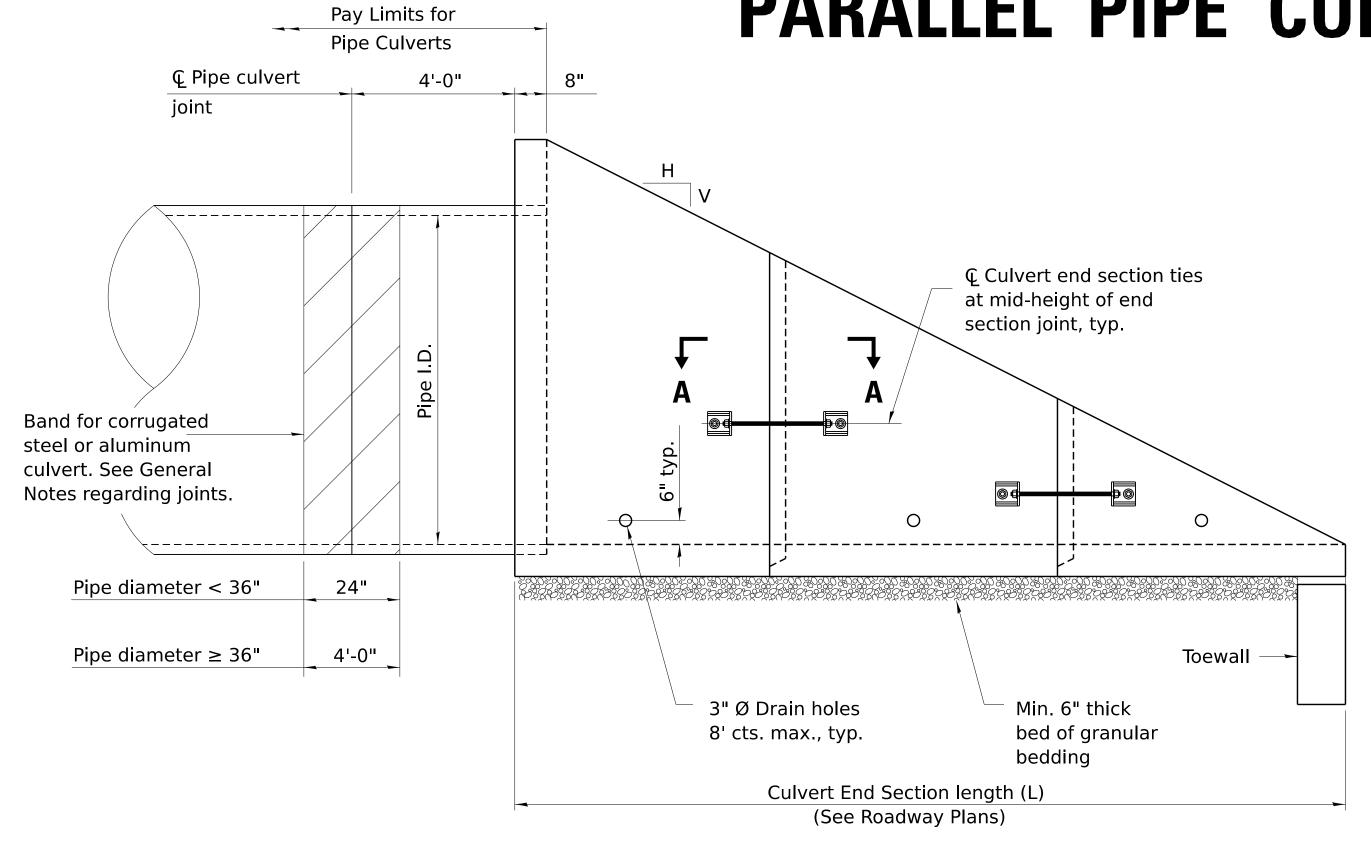
NEENAH: R-4349-D 5.4 sq. ft. Opening



SECTION A-A

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 4-27-23				F.A. RTE	SECTION	COUNTY TOTA	AL SHEET NO.
	DRAWN -	REVISED - 3-23-23	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD				
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.	-
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 13 OF SHEETS STA. TO STA.		ILLINOIS FEI	D. AID PROJECT	

CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.



Backwall

(a) 90 granular bedding

END VIEW
(Showing pipes)

* This dimension shall be increased by 1" for CIP field construction. See General Notes.

GENERAL NOTES

The concrete end sections detailed herein for flexible type pipe culverts are restricted to use with parallel type drainage structures only and traversable pipe grating placed perpendicular to the sidewalls. When traversable pipe grating placed parallel to the sidewalls is required, use standard 542001 or 542011.

A segment of pipe culvert shall be cast into the backwall of the concrete end section such that a minimum of 4 ft of pipe culvert extends from the back face of the end section as shown in Elevation.

Segments of pipe culvert shall be joined in accordance with Article 542 of the Standard Specifications except bands for corrugated steel or aluminum culverts shall conform to the length requirements shown in elevation and have the same corrugations as the culvert pipe. These bands will be included in cost of the pipe.

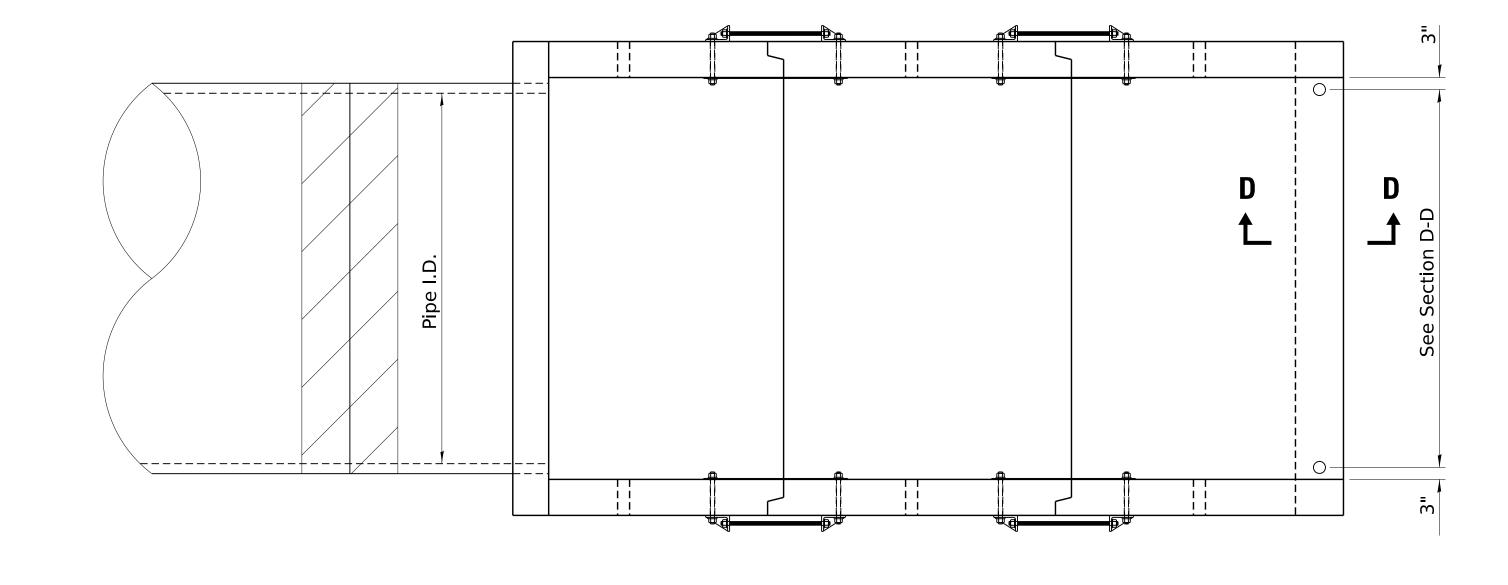
The number of segments shown in elevation is for example only. The length and number of precast sections required to construct the end section shall be determined by the Contractor.

See roadway plans for slope (V:H) and pipe inside diameter.

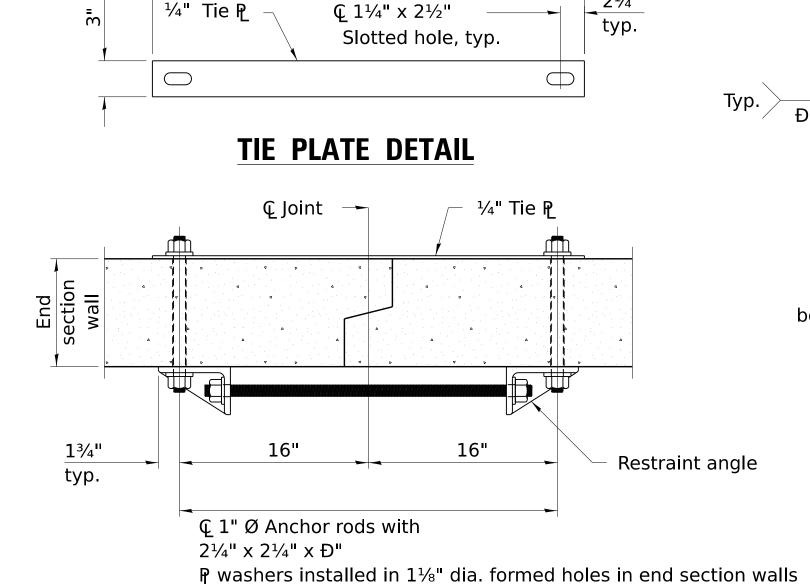
2½" x 2½" x Đ" plate washers shall be provided under each nut required for the anchor rods. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of formed holes.

All slope ratios are expressed as units of verical dispacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.



ELEVATION



36"

p. $\frac{6"}{1"}$ L 6" x 4" x ½" $\frac{C}{4}$ $\frac{1''}{4}$ Ø hole in 3"

bottom leg of angle $\frac{6}{1}$ $\frac{1}{4}$ $\frac{1}{4}$

RESTRAINT ANGLE DETAIL

SECTION A–A(Showing end section tie details)

SCALE:

 USER NAME
 = IDOT / DISTRICT 2
 DESIGNED REVISED 1-05-16

 DRAWN REVISED 5-09-14

CHECKED -

DATE

PLOT DATE = 4/17/2025

PLAN

REVISED

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	REGIO	N 2 / D	ISTRICT 2	STANDARD	
•	SHEET 14	OF	SHEETS	STA.	

RTE. SECTION COUNTY SHEE

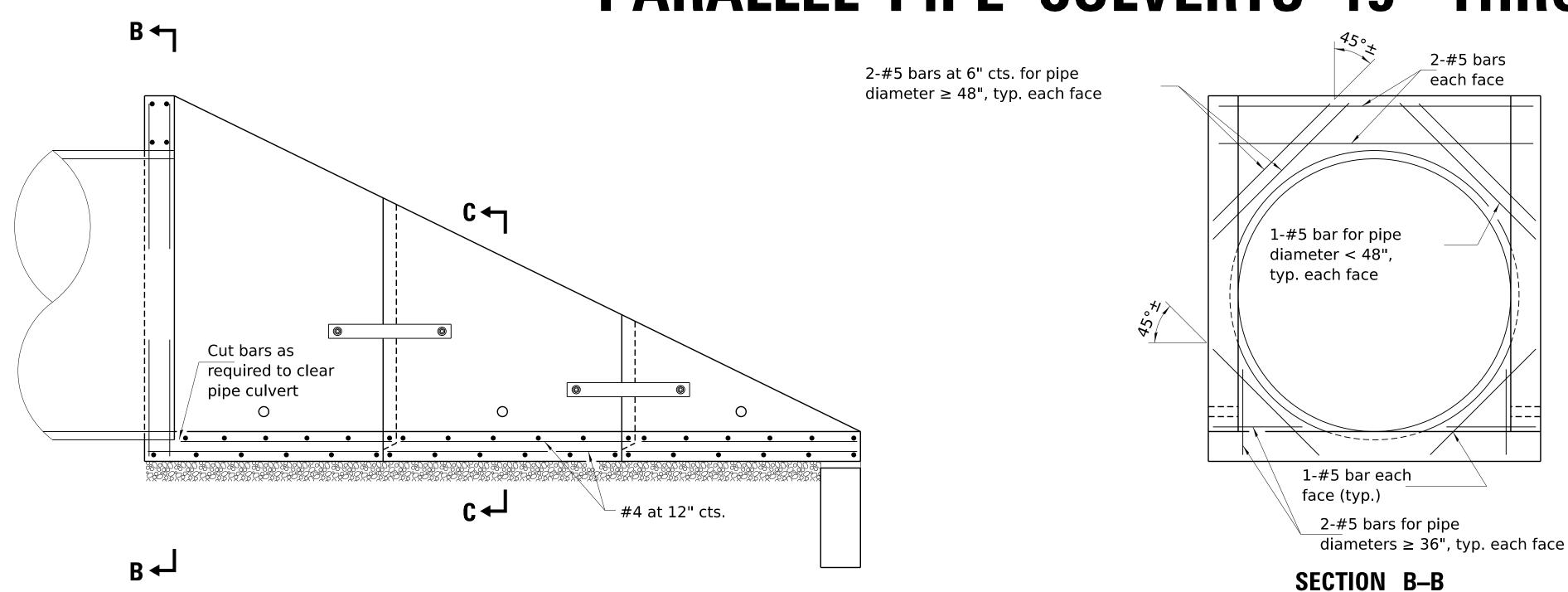
CONTRACT NO.

ILLINOIS FED. AID PROJECT

TO STA.

TOTAL SHEET NO.

CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.



LONGITUDINAL SECTION

(Showing bottom slab and backwall reinforcement.)

(Showing backwall reinforcement for pipes.)

		Tables	IB, IC, IIIA, AI	ND IIIB	
Pipe I.D.				L	
·			Slop	e of End Sect	ion
	R	S	1:4	1:6	1:10
15"	25"	16"	9'-0"	13'-2"	21'-6"
18"	28"	18"	10'-0"	14'-8"	24'-0"
21"	31"	22"	11'-0"	16'-2"	26'-6"
24"	35"	24"	12'-4"	18'-2"	29'-10"
30"	3'-5"	30"	14'-4"	21'-2"	34'-10"
36"	3'-11"	36"	16'-4"	24'-2"	39'-10"
42"	4'-5"	3'-6"	18'-4"	27'-2"	44'-10"
48"	5'-0"	4'-0"	20'-8"	30'-8"	50'-8"
54"	5'-4"	4'-6"	22'-0"	32'-8"	54'-0"
60"	5'-10"	5'-0"	24'-0"	35'-8"	59'-0"
66"	6'-4"	5'-6"	26'-0"	38'-8"	64'-0"
72"	6'-10"	6'-0"	28'-0"	41'-8"	69'-0"
78"	7'-4"	6'-6"	30'-0"	44'-8"	74'-0"
84"	7'-10"	7'-0"	32'-0"	47'-8"	79'-0"

PARALLEL PIPE CULVERT END SECTION DIMENSIONS

	1				
		Tables	IB, IC, IIIA, AI	ND IIIB	
Pipe I.D.				L	
·			Slop	e of End Sect	ion
	R	S	1:4	1:6	1:10
15"	25"	16"	9'-0"	13'-2"	21'-6"
18"	28"	18"	10'-0"	14'-8"	24'-0"
21"	31"	22"	11'-0"	16'-2"	26'-6"
24"	35"	24"	12'-4"	18'-2"	29'-10"
30"	3'-5"	30"	14'-4"	21'-2"	34'-10"
36"	3'-11"	36"	16'-4"	24'-2"	39'-10"
42"	4'-5"	3'-6"	18'-4"	27'-2"	44'-10"
48"	5'-0"	4'-0"	20'-8"	30'-8"	50'-8"
54"	5'-4"	4'-6"	22'-0"	32'-8"	54'-0"
60"	5'-10"	5'-0"	24'-0"	35'-8"	59'-0"
66"	6'-4"	5'-6"	26'-0"	38'-8"	64'-0"
72"	6'-10"	6'-0"	28'-0"	41'-8"	69'-0"
78"	7'-4"	6'-6"	30'-0"	44'-8"	74'-0"
84"	7'-10"	7'-0"	32'-0"	47'-8"	79'-0"

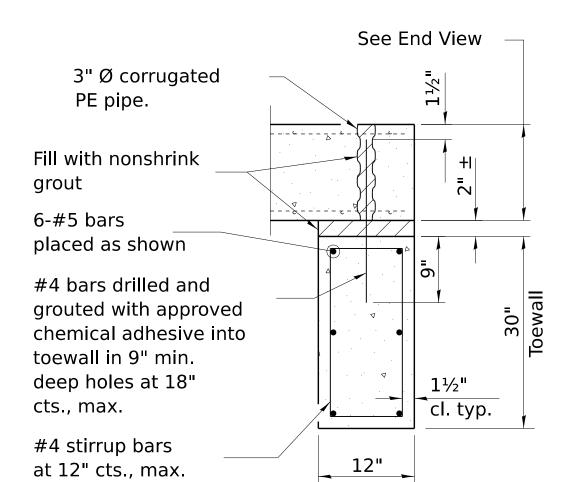
The above "Tables" are referenced from Article 542.03 of the Standard Specifications.

LAP DIMENSION

#5 bar = 21" #6 bar = 25"

1½" cl.

(3" cl. for CIP constr.)



SECTION D-D

1½" cl. (Typ., except #4 bars at as noted) [/] 12" cts. Optional bonded construction joint

* The Contractor may use lap splices for the sidewall

reinforcement at the locations shown.

SECTION C-C

8" (typ.)

DESIGNED -REVISED 1-05-16 USER NAME = IDOT / DISTRICT 2 DRAWN 5-09-14 REVISED -REVISED CHECKED -PLOT DATE = 4/17/2025 DATE REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SECTION REGION 2 / DISTRICT 2 STANDARD SCALE: SHEET 15 SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

TOTAL SHEET NO.

REINFORCEMENT SCHEDULE

PIPES

Bar

#4

#4

#4

#4

#4

#4

#4

#4

#5

#5

#5

Pipe I.D.

15"

18"

21"

24"

36"

42"

48"

54"

60"

72"

78"

84"

 A_{s1m}

| Size | Spacing

12"

12"

12"

12"

12"

12"

12"

8"

8"

8"

8"

8"

8"

COUNTY

CONTRACT NO.

CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.

QUANTITIES

				Tables IB	, IC, IIIA, A	ND IIIB			
Pipe I.D.	(Concrete y	d ³	Reinfo	rcement w Lap lbs.	ithout	Rein	forcement Lap lbs.	with
	Slope	of End Sec	ction	Slope	of End Se	ction	Slope	of End Se	ction
	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10
15"	1.4	1.9	2.8	250	330	510	270	350	540
18"	1.6	2.2	3.4	290	400	600	310	420	640
21"	2.0	2.7	4.2	330	450	690	360	480	740
24"	2.3	3.2	5.0	370	510	790	400	550	850
30"	3.1	4.3	6.7	490	680	1060	520	720	1130
36"	3.9	5.5	8.7	580	810	1270	620	870	1360
42"	4.9	6.9	10.9	720	1020	1610	770	1080	1710
48"	6.0	8.6	13.7	940	1320	2090	1010	1420	2240
54"	6.9	9.8	15.7	1090	1540	2440	1160	1650	2610
60"	8.1	11.6	18.6	1410	2000	3190	1530	2180	3480
66"	9.5	13.6	21.8	1650	2360	3780	1780	2560	4100
72"	10.9	15.7	25.2	1840	2630	4220	1990	2850	4580
78"	12.4	17.9	28.9	2110	3040	4900	2280	3280	5290
84"	14.1	20.3	32.8	2710	3910	6320	2970	4290	6950

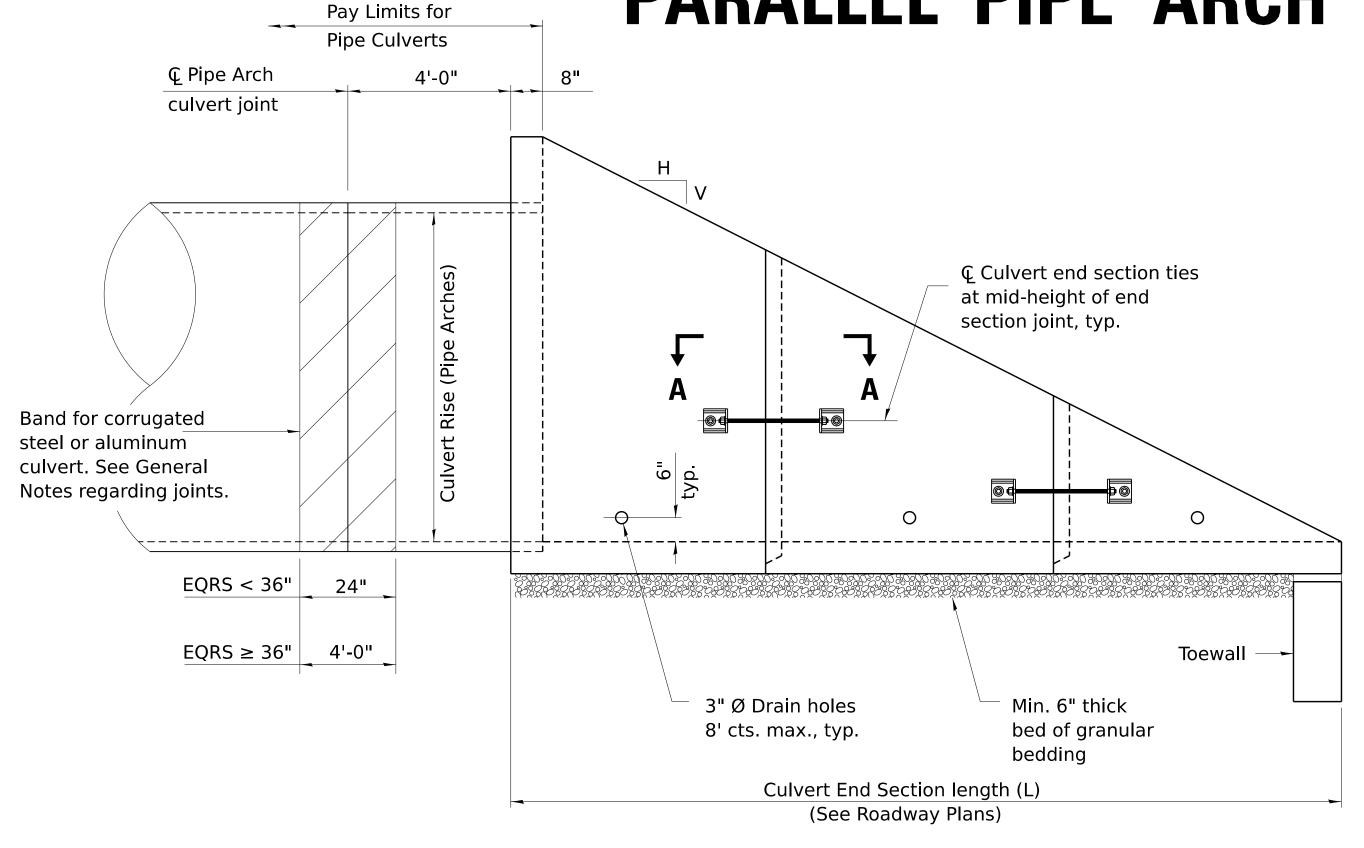
The above quantities are estimates and provided for information only. Actual quantities may vary depending upon the final layout of reinforcement and number of segments determined by the Contractor.

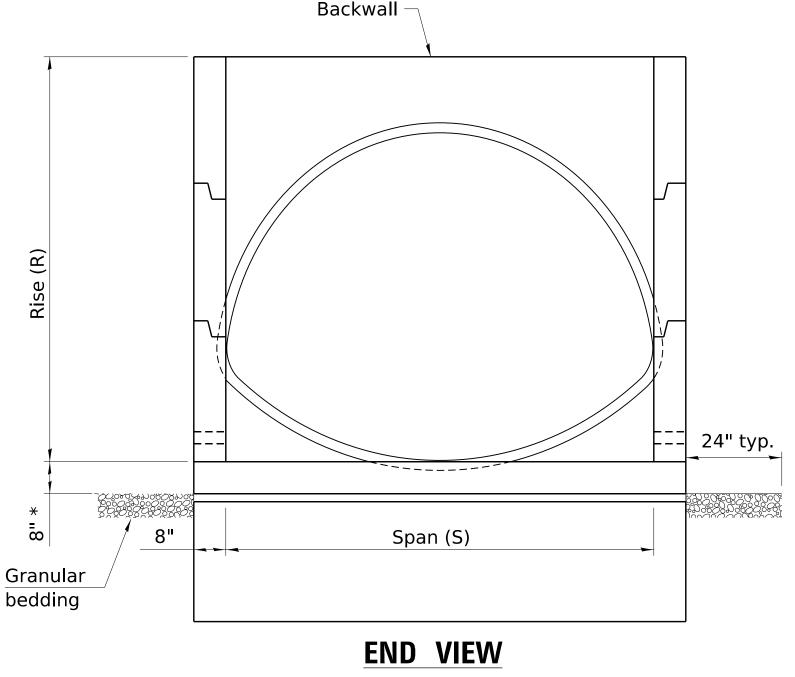
For cast-in-place construction, increase concrete volumes by approximately 12%.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-05-16				F.A. RTF	SECTION	COUNTY TOTAL SHEETS
	DRAWN -	REVISED - 5-09-14	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	1112.		OTILLIO
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 16 OF SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT

TOTAL SHEET NO.

CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.





(Showing pipe arches)

* This dimension shall be increased by 1½" for

CIP field construction. See General Notes.

GENERAL NOTES

The concrete end sections detailed herein for flexible type pipe culverts are restricted to use with parallel type drainage structures only and traversable pipe grating placed perpendicular to the sidewalls. When traversable pipe grating placed parallel to the sidewalls is required, use standard 542001 or 542011.

A segment of pipe culvert shall be cast into the backwall of the concrete end section such that a minimum of 4 ft of pipe culvert extends from the back face of the end section as shown in Elevation.

Segments of pipe culvert shall be joined in accordance with Article 542 of the Standard Specifications except bands for corrugated steel or aluminum culverts shall conform to the length requirements shown in elevation and have the same corrugations as the culvert pipe. These bands will be included in cost of the pipe.

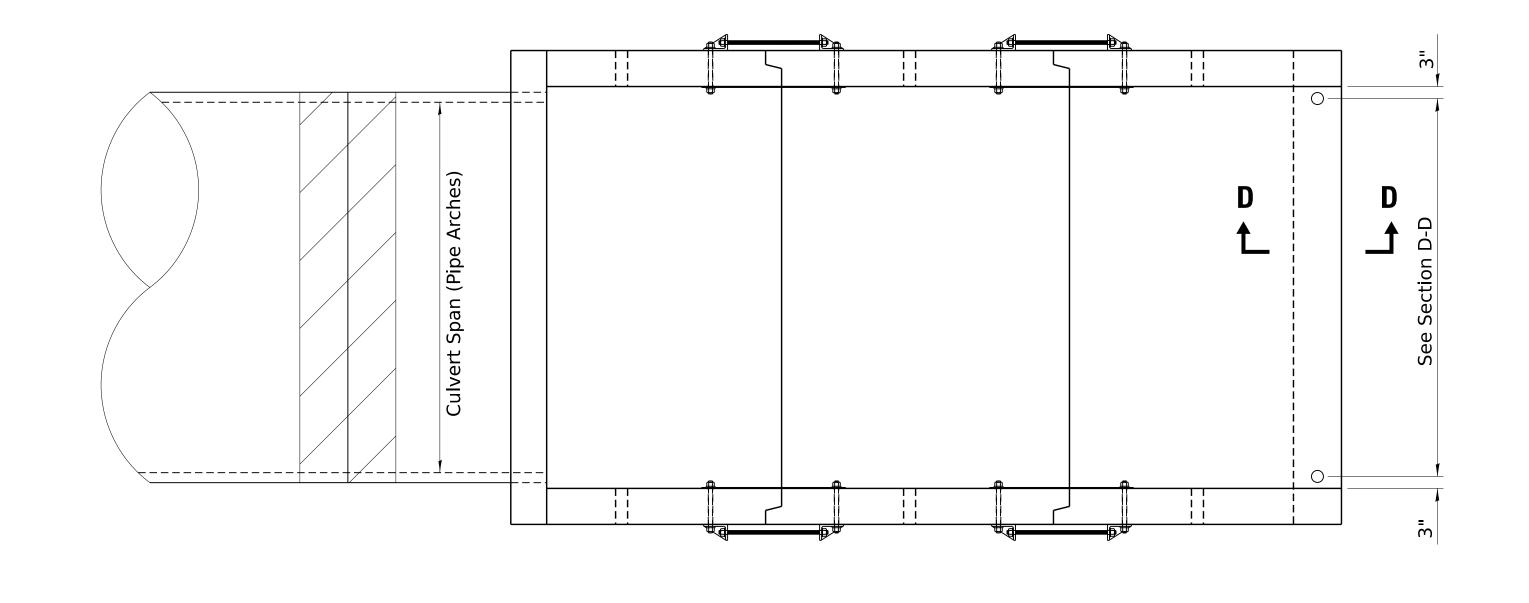
The number of segments shown in elevation is for example only. The length and number of precast sections required to construct the end section shall be determined by the Contractor.

See roadway plans for slope (V:H) and pipe inside diameter.

 $2\frac{1}{4}$ " x $2\frac{1}{4}$ " x D" plate washers shall be provided under each nut required for the anchor rods. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of formed holes.

All slope ratios are expressed as units of verical dispacement to units of horizontal displacement (V:H).

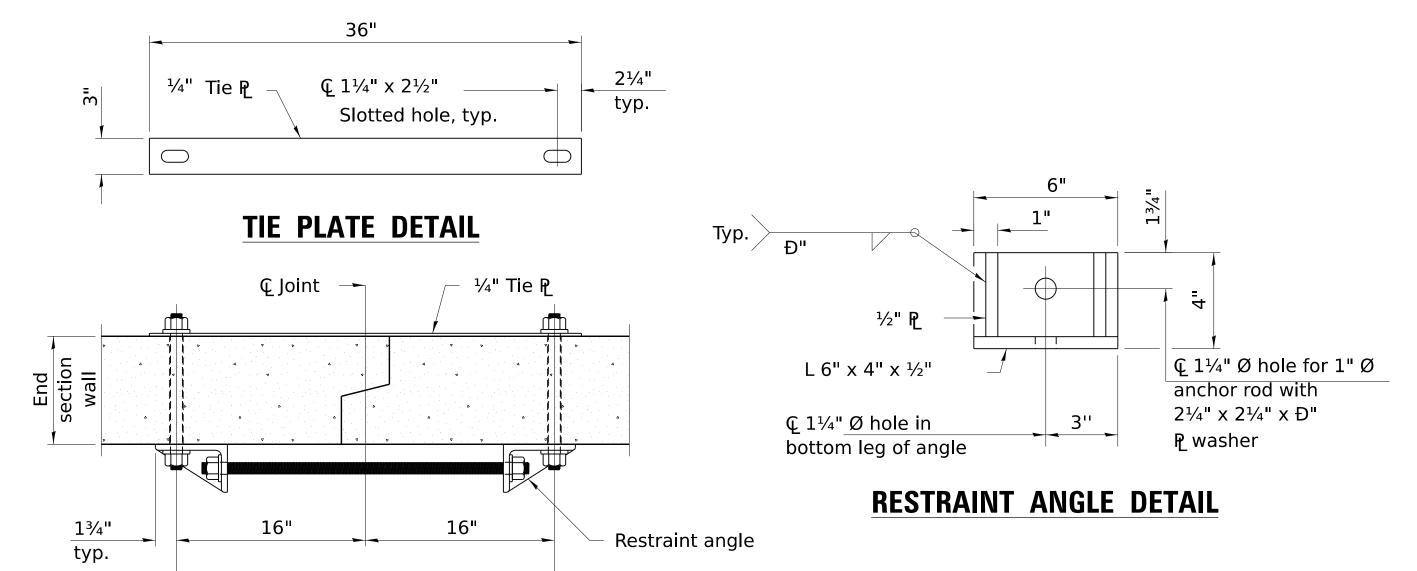
All dimensions are in inches unless otherwise shown.



DATE

PLOT DATE = 4/17/2025

ELEVATION



SECTION A-A (Showing end section tie details)

© 1" Ø Anchor rods with

21/4" x 21/4" x Đ"

DESIGNED REVISED 5-09-14 USER NAME = IDOT / DISTRICT 2 **STATE OF ILLINOIS** DRAWN REVISED **DEPARTMENT OF TRANSPORTATION** REVISED CHECKED -

PLAN

REVISED

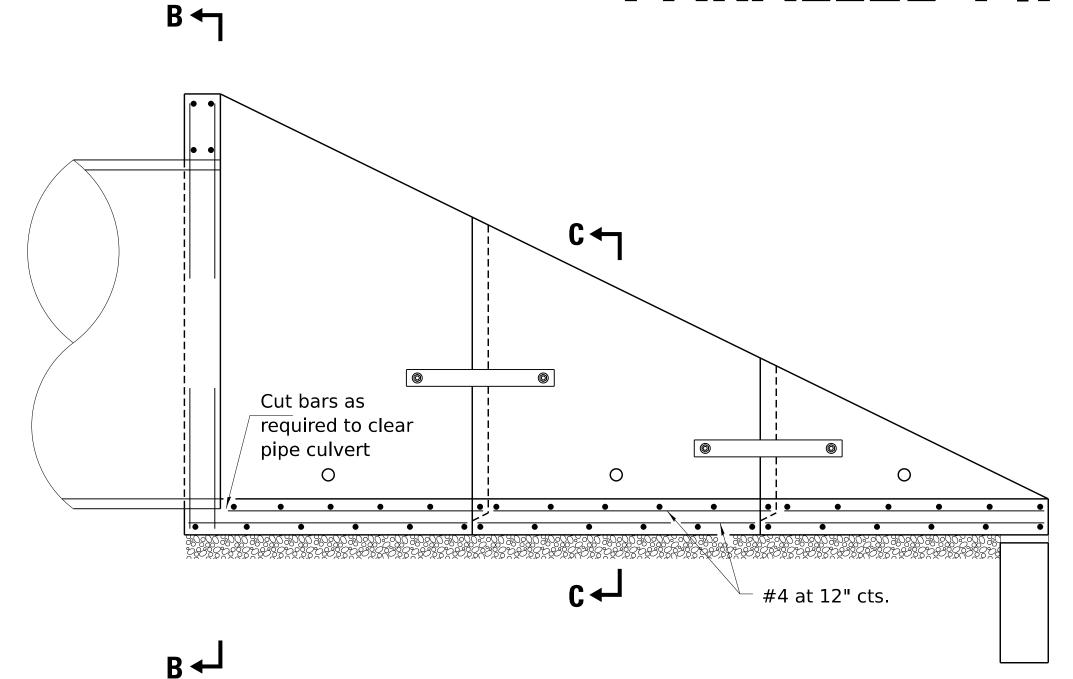
REGION 2 / DISTRICT 2 STANDARD SHEETS STA. SCALE: SHEET 17

P washers installed in 11/8" dia. formed holes in end section walls

TOTAL SHEET NO. **SECTION** COUNTY CONTRACT NO. ILLINOIS | FED. AID PROJECT

TO STA.

CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.



LONGITUDINAL SECTION

(Showing bottom slab and backwall reinforcement.)

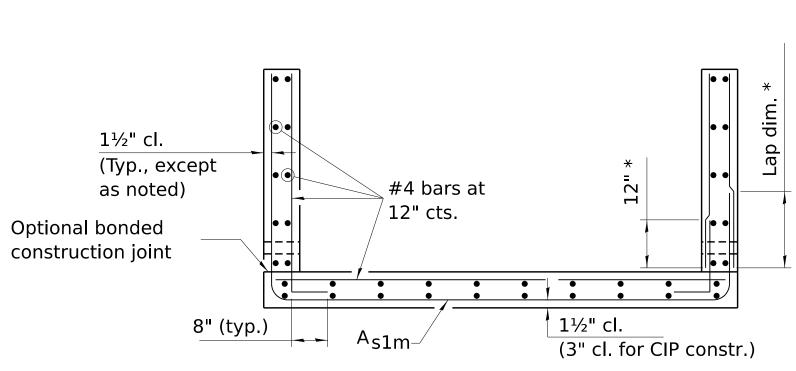
2-#5 bars each face EQRS ≥48", typ. each face 1-#5 bar for EQRS <48", typ. each face Option

2-#5 bars at 6" cts. for

LAP DIMENSION

#4 bar = 17" #5 bar = 21" #6 bar = 25"

* The Contractor may use lap splices for the sidewall reinforcement at the locations shown.



SECTION C-C

REINFORCEMENT SCHEDULE

PIPE ARCHES

Round Size | Size | Spacing

#4

#4

#4

#4

#4

#4

#5

#5

Equivalent

15"

18"

21"

24"

30"

36"

42"

48"

54"

60"

66"

72"

78"

84"

 A_{s1m}

12"

SECTION B-B

1-#5 bar each

EQRS ≥36", typ. each face

face (typ.)

(Showing backwall reinforcement for arches.)

- 2-#5 bars for

PARALLEL PIPE ARCH CULVERT END SECTION DIMENSIONS

	Cul	vert	Table	e IIA, Corrug	gation :	2	' X ½"	Cul	vert	Table	e IIA, Corru	gation :	3	3" x 1"
Equivalent Round Size	Span	Rise			Clone	L e of End Sec	tion	Span	Rise			Clo	L pe of End Se	ction
	Span	11130	R	S	1:4	1:6	1:10	эрин	TUSC	R	S	1:4	1:6	1:10
15"	17"	13"	23"	18"	8'-4"	12'-2"	19'-10"	-	-	-	-	-	-	_
18"	21"	15"	25"	22"	9'-0"	13'-2"	21'-6"	-	-	-	-	-	-	-
21"	24"	18"	28"	24"	10'-0"	14'-8"	24'-0"	-	-	-	-	-	-	-
24"	28"	20"	30"	28"	10'-8"	15'-8"	25'-8"	-	-	-	-	-	-	-
30"	35"	24"	34"	36"	12'-0"	17'-8"	29'-0"	-	-	-	-	-	-	-
36"	42"	29"	39"	3'-6"	13'-8"	20'-2"	33'-2"	40"	31"	3'-6"	40"	14'-8"	21'-8"	35'-8'
42"	49"	33"	3'-7"	4'-2"	15'-0"	22'-2"	36'-6"	46"	36"	3'-11"	3'-10"	16'-4"	24'-2"	39'-10
48"	57"	38"	4'-0"	4'-10"	16'-8"	24'-8"	40'-8"	53"	41"	4'-5"	4'-6"	18'-4"	27'-2"	44'-10
54"	64"	43"	4'-5"	5'-4"	18'-4"	27'-2"	44'-10"	60"	46"	4'-10"	5'-0"	20'-0"	29'-8"	49'-0'
60"	71"	47"	4'-9"	6'-0"	19'-8"	29'-2"	48'-2"	66"	51"	5'-3"	5'-6"	21'-8"	32'-2"	53'-2'
66"	77"	52"	5'-2"	6'-6"	21'-4"	31'-8"	52'-4"	73"	55"	5'-8"	6'-2"	23'-4"	34'-8"	57'-4'
72"	83"	57"	5'-7"	7'-0"	23'-0"	34'-2"	56'-6"	81"	59"	6'-0"	6'-10"	24'-8"	36'-8"	60'-8
78"	-	-	-	-	-	-	-	87"	63"	6'-5"	7'-4"	26'-4"	39'-2"	64'-10
84"	_	_	_	_	<u>-</u>	_	_	95"	67"	6'-9"	8'-0"	27'-8"	41'-2"	68'-2

See End View 3" Ø corrugated 11/2" PE pipe. Fill with nonshrink grout 6-#5 bars placed as shown #4 bars drilled and grouted with approved chemical adhesive into toewall in 9" min. deep holes at 18" 1½" cl. typ. cts., max.

#4 stirrup bars

at 12" cts., max.

SECTION D-D

12"

The above "Tables" are referenced from Article 542.03 of the Standard Specifications.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 5-09-14									F.A. RTE.	SECTION	COUNTY TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -	STATE OF ILLINOIS		REGI	ON 2 / D	DISTRICT	2 STAND	ARD					
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION										CONTRACT NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 18	OF	SHEET	STA.	TC	O STA.		ILLINOIS FED. AI	D PROJECT	

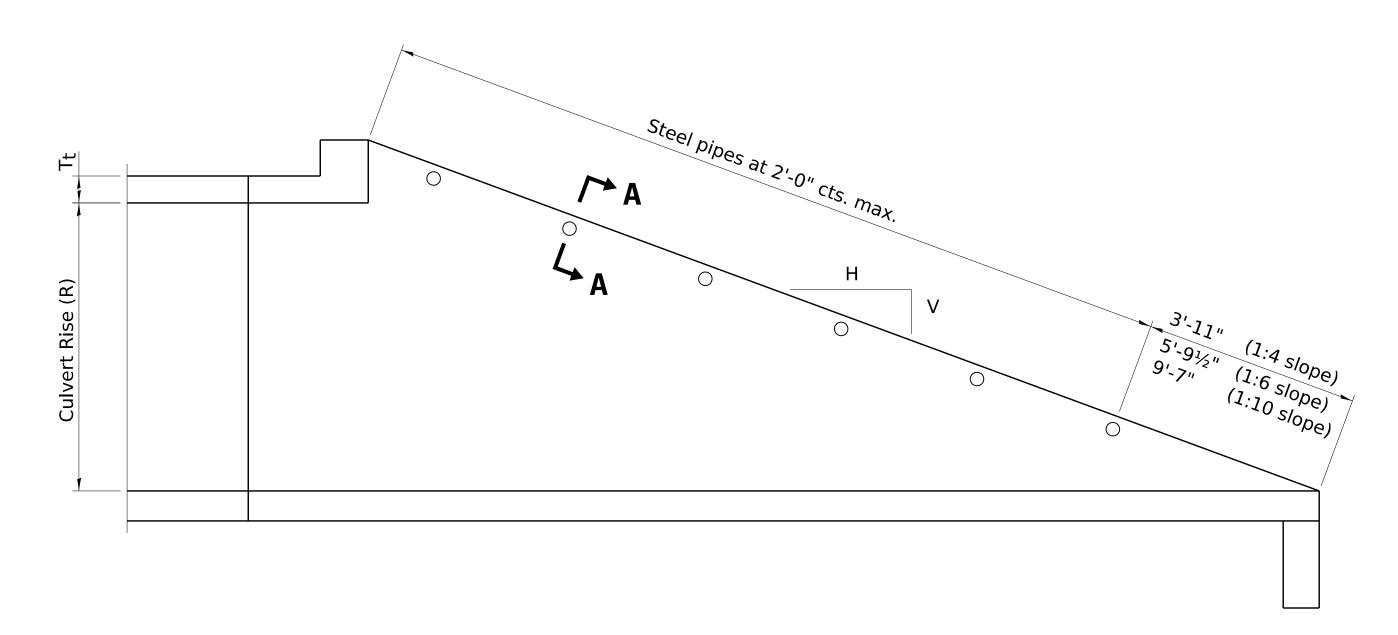
CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.

QUANTITIES

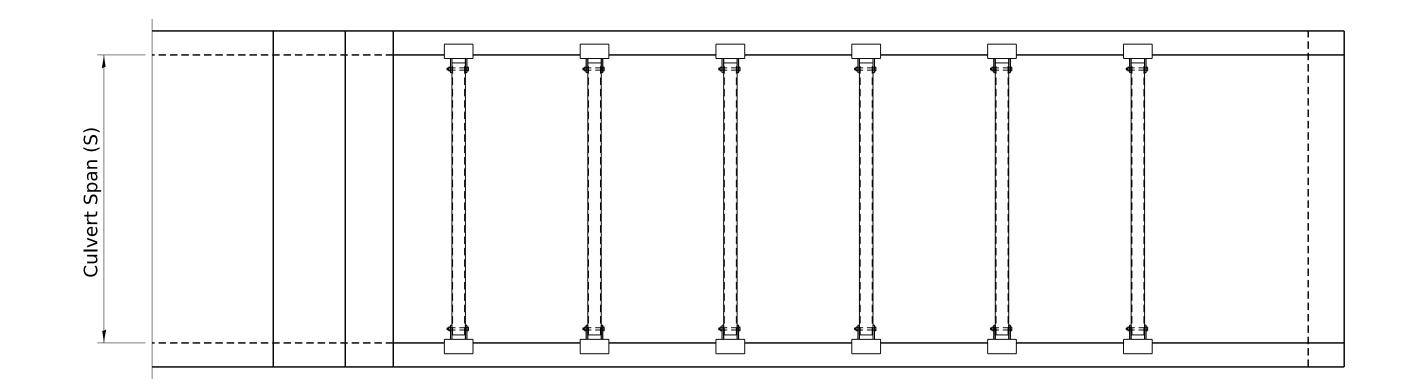
			Tā	able IIA, Co	rrugation:	2 " x ½	/ ₂ "					7	Гable IIA, С	orrugation	: 3" x 1"			
Equivalent	(Concrete y	′d ³	Reinfo	rcement w Lap lbs.	ithout	Rein	forcement Lap lbs.	with	(Concrete y	d ³	Reinfo	rcement w Lap lbs.	ithout	Rein	forcement Lap lbs.	with
Round Size	Slope	of End Se	ction	Slope	of End Se	ction	Slope	of End Se	ction	Slope	of End Se	ction	Slope	of End Se	ction	Slope	of End Se	ction
	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10
15"	1.3	1.8	2.7	240	320	480	250	330	500	-	-	-	-	-	-	-	-	-
18"	1.5	2.1	3.2	270	360	540	290	370	570	-	-	-	-	-	-	-	-	-
21"	1.8	2.5	3.8	310	420	630	330	450	670	-	-	-	-	-	-	-	-	-
24"	2.1	2.8	4.4	360	480	730	380	510	780	-	-	-	-	-	-	-	-	-
30"	2.7	3.7	5.7	420	570	860	440	610	920	-	-	-	-	-	-	-	-	-
36"	3.4	4.6	7.2	520	700	1070	550	740	1140	3.6	5.0	7.8	560	770	1200	600	820	1270
42"	4.1	5.7	8.9	630	860	1340	660	910	1420	4.4	6.1	9.6	640	890	1380	680	940	1470
48"	5.0	7.0	11.0	740	1010	1560	780	1070	1650	5.5	7.7	12.2	800	1120	1750	840	1180	1860
54"	5.9	8.4	13.2	940	1320	2060	1000	1400	2190	6.4	9.1	14.4	980	1380	2170	1050	1470	2310
60"	6.9	9.7	15.4	1050	1470	2300	1110	1560	2440	7.4	10.6	16.8	1120	1580	2500	1190	1680	2670
66"	8.0	11.3	17.9	1190	1680	2630	1260	1780	2800	8.7	12.4	19.7	1320	1870	2960	1390	1980	3140
72"	9.1	12.9	20.6	1540	2190	3490	1660	2350	3770	9.9	14.1	22.4	1660	2360	3760	1790	2550	4060
78"	-	-	-	-	-	-	-	-	-	11.1	15.9	25.5	1880	2700	4320	2010	2900	4640
84"	-	-	-	-	-	-	-	-	-	12.4	17.8	28.5	2050	2940	4690	2200	3150	5040

The above quantities are estimates and provided for information only. Actual quantities may vary depending upon the final layout of reinforcement and number of segments determined by the Contractor.

For cast-in-place construction, increase concrete volumes by approximately 12%.



LONGITUDINAL SECTION



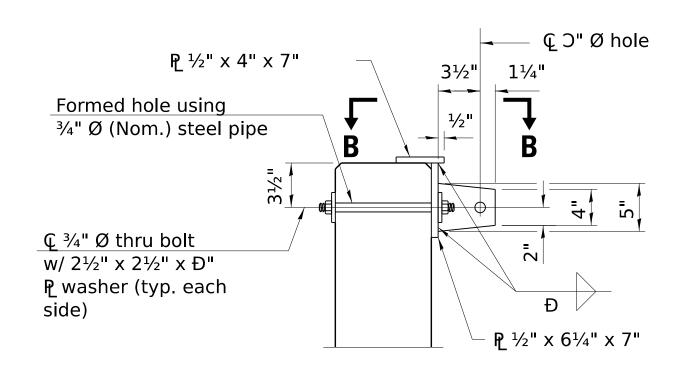
PLAN VIEW

GENERAL NOTES

The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be $1\frac{1}{2}$ " unless noted otherwise.

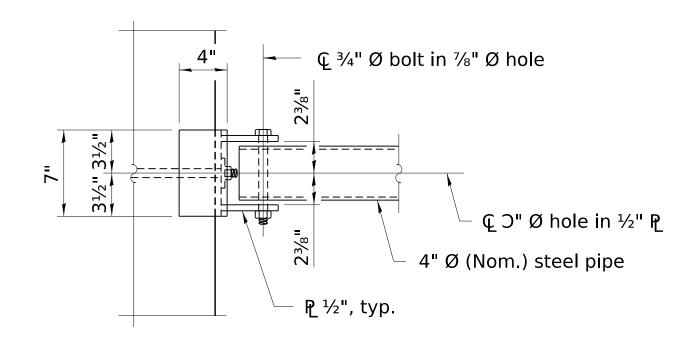
This standard shall only be used on concrete end sections for parallel drainage structures.

The Contractor may install the thru bolts using drilling and grouting in lieu of providing a formed hole using steel pipe. Installation shall be in accordance with Article 509.06 using a method that results in the annulus surrounding the bolt being completely filled with adhesive. The method of drilling shall not result in spalled concrete at the exit face. Epoxy grouted thru bolts shall be snug tightened followed by an additional 1/3 turn on the interior nut at final installation. Cost included with Traversable Pipe Grate.



SECTION A-A

(4" Ø pipe not shown for clarity.)



VIEW B-B

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 5-09-14				F.A.	SECTION	COUNTY SHEET NO
	DRAWN -	REVISED -	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	IXI'E.		SHEETO NO.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 20 OF SHEETS STA. TO STA.		ILLINOIS FE	ED. AID PROJECT

PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS

				(< 2 ET COVER			
				(<2 FT COVER			
вох	SIZE			SLOPE OF END SEC		-	1 10
	1	Pipes	.:4 Total Length	Pipes	1:6 Total Length	Pipes	1:10 Total Length
SPAN (FT.)	RISE (FT.)	No. / Length	of Pipe	No. / Length	of Pipe	No. / Length	of Pipe
3	2	5 @ 2'-7"	12'-11"	8 @ 2'-7"	20'-8"	12 @ 2'-7"	31'-0"
3	3	7 @ 2'-7"	18'-1"	11 @ 2'-7"	28'-5"	17 @ 2'-7"	43'-11"
4	2	5 @ 3'-7"	17'-11"	8 @ 3'-7"	28'-8"	13 @ 3'-7"	46'-7"
4	3	8 @ 3'-7"	28'-8"	11 @ 3'-7"	39'-5"	18 @ 3'-7"	64'-6"
4	4	10 @ 3'-7"	35'-10"	14 @ 3'-7"	50'-2"	23 @ 3'-7"	82'-5"
5	2	6 @ 4'-7"	27'-6"	8 @ 4'-7"	36'-8"	13 @ 4'-7"	59'-7"
5	3	8 @ 4'-7"	36'-8"	11 @ 4'-7"	50'-5"	18 @ 4'-7"	82'-6"
5	4	10 @ 4'-7"	45'-10"	14 @ 4'-7"	64'-2"	23 @ 4'-7"	105'-5"
5	5	12 @ 4'-7"	55'-0"	17 @ 4'-7"	77'-11"	28 @ 4'-7"	128'-4"
6	2	6 @ 5'-7"	33'-6"	8 @ 5'-7"	44'-8"	13 @ 5'-7"	72'-7"
6	3	8 @ 5'-7"	44'-8"	11 @ 5'-7"	61'-5"	18 @ 5'-7"	100'-6"
6	4	10 @ 5'-7"	55'-10"	14 @ 5'-7"	78'-2"	23 @ 5'-7"	128'-5"
6	5	12 @ 5'-7"	67'-0"	17 @ 5'-7"	94'-11"	28 @ 5'-7"	156'-4"
6	6	14 @ 5'-7"	78'-2"	20 @ 5'-7"	111'-8"	33 @ 5'-7"	184'-3"
7	2	6 @ 6'-7"	39'-6"	8 @ 6'-7"	52'-8"	13 @ 6'-7"	85'-7"
7	3	8 @ 6'-7"	52'-8"	11 @ 6'-7"	72'-5"	18 @ 6'-7"	118'-6"
7	4	10 @ 6'-7"	65'-10"	14 @ 6'-7"	92'-2"	23 @ 6'-7"	151'-5"
7	5	12 @ 6'-7"	79'-0"	17 @ 6'-7"	111'-11"	28 @ 6'-7"	184'-4"
7	6	14 @ 6'-7"	92'-2"	20 @ 6'-7"	131'-8"	33 @ 6'-7"	217'-3"
7	7	16 @ 6'-7"	105'-4"	23 @ 6'-7"	151'-5'	38 @ 6'-7"	250'-2"
8	2	6 @ 7'-7"	45'-6"	8 @ 7'-7"	60'-8"	13 @ 7'-7"	98'-7"
8	3	8 @ 7'-7"	60'-8"	11 @ 7'-7"	83'-5"	18 @ 7'-7"	136'-6"
8	4	10 @ 7'-7"	75'-10"	14 @ 7'-7"	106'-2"	23 @ 7'-7"	174'-5"
8	5	12 @ 7'-7"	91'-0"	17 @ 7'-7"	128'-11"	28 @ 7'-7"	212'-4"
8	6	14 @ 7'-7"	106'-2"	20 @ 7'-7"	151'-8"	33 @ 7'-7"	250'-3"
8	7	16 @ 7'-7"	121'-4"	23 @ 7'-7"	174'-5"	38 @ 7'-7"	288'-2"
8	8	18 @ 7'-7"	136'-6"	26 @ 7'-7"	197'-2"	43 @ 7'-7"	326'-1"
9	2	6 @ 8'-7"	51'-6"	8 @ 8'-7"	68'-8"	13 @ 8'-7"	111'-7"
9	3	8 @ 8'-7"	68'-8"	11 @ 8'-7"	94'-5"	18 @ 8'-7"	154'-6'
9	4	10 @ 8'-7"	85'-10"	14 @ 8'-7"	120'-2"	23 @ 8'-7"	197'-5"
9	5	12 @ 8'-7"	103'-0"	17 @ 8'-7"	145'-11"	28 @ 8'-7"	240'-4"
9	6	14 @ 8'-7"	120'-2"	20 @ 8'-7"	171'-8"	33 @ 8'-7"	283'-3"
9	7		137'-4"		197'-5"		326'-2"
9	8	16 @ 8'-7" 18 @ 8'-7"	154'-6"	23 @ 8'-7" 26 @ 8'-7"	223'-2"	38 @ 8'-7" 43 @ 8'-7"	369'-1"
9	9		171'-8"		257'-6"		412'-0"
		20 @ 8'-7"		30 @ 8'-7"		48 @ 8'-7"	
10	2	6 @ 9'-7"	57'-6"	9 @ 9'-7"	86'-3"	14 @ 9'-7"	134'-2"
10	3	8 @ 9'-7"	76'-8"	12 @ 9'-7"	115'-0"	19 @ 9'-7"	182'-1"
10	4	10 @ 9'-7"	95'-10"	15 @ 9'-7"	143'-9"	24 @ 9'-7"	230'-0"
10	5	12 @ 9'-7"	115'-0"	18 @ 9'-7"	172'-6"	29 @ 9'-7"	277'-11"
10	6	14 @ 9'-7"	134'-2"	21 @ 9'-7"	201'-3"	34 @ 9'-7"	325'-10"
10	7	16 @ 9'-7"	153'-4"	24 @ 9'-7"	230'-0"	39 @ 9'-7"	373'-9"
10	8	18 @ 9'-7"	172'-6"	27 @ 9'-7"	258'-9"	44 @ 9'-7"	421'-8"
10	9	20 @ 9'-7"	191'-8"	30 @ 9'-7"	287'-5"	49 @ 9'-7"	469'-7"
10	10	22 @ 9'-7"	210'-10"	33 @ 9'-7"	316'-3"	54 @ 9'-7"	517'-6"

PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS

	(<2 FT COVER)									
DOV	CIZE		SLOPE OF END SECTION							
BOX	SIZE	1	:4		1:6		L:10			
SPAN (FT.)	RISE (FT.)	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe			
11	2	6 @ 10'-7"	63'-6"	9 @ 10'-7"	95'-3"	14 @ 10'-7"	148'-2"			
11	3	8 @ 10'-7"	84'-8"	12 @ 10'-7"	127'-0"	19 @ 10'-7"	201'-1"			
11	4	10 @ 10'-7"	105'-10"	15 @ 10'-7"	158'-9"	24 @ 10'-7"	254'-0"			
11	6	14 @ 10'-7"	148'-2"	21 @ 10'-7"	222'-3"	34 @ 10'-7"	359'-10"			
11	8	18 @ 10'-7"	190'-6"	27 @ 10'-7"	285'-9"	44 @ 10'-7"	465'-8"			
11	10	23 @ 10'-7"	243'-5"	33 @ 10'-7"	349'-3"	54 @ 10'-7"	571'-6"			
11	11	25 @ 10'-7"	264'-7"	36 @ 10'-7"	381'-0"	59 @ 10'-7"	624'-5"			
12	2	6 @ 11'-7"	69'-6"	9 @ 11'-7"	104'-3"	15 @ 11'-7"	173'-9"			
12	3	8 @ 11'-7"	92'-8"	12 @ 11'-7"	139'-0"	20 @ 11'-7"	231'-8"			
12	4	10 @ 11'-7"	115'-10"	15 @ 11'-7"	173'-9"	25 @ 11'-7"	289'-7"			
12	6	15 @ 11'-7"	173'-9"	21 @ 11'-7"	243'-3"	35 @ 11'-7"	405'-5"			
12	8	19 @ 11'-7"	220'-1"	27 @ 11'-7"	312'-9"	45 @ 11'-7"	521'-3"			
12	10	23 @ 11'-7"	266'-5"	33 @ 11'-7"	382'-3"	55 @ 11'-7"	637'-1"			
12	12	27 @ 11'-7"	312'-9"	39 @ 11'-7"	451'-9"	65 @ 11'-7"	752'-11"			

PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS

				(>2 FT COVER)		
DOV	CIZE		S	SLOPE OF END SEC	TION		
BOX	SIZE	-	L:4		1:6		1:10
SPAN (FT.)	RISE (FT.)	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
3	2	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"	11 @ 2'-7"	28'-5"
3	3	7 @ 2'-7"	18'-1"	10 @ 2'-7"	25'-10"	16 @ 2'-7"	41'-4"
4	2	5 @ 3'-7"	17'-11"	7 @ 3'-7"	25'-1"	12 @ 3'-7"	43'-0"
4	3	7 @ 3'-7"	25'-1"	10 @ 3'-7"	35'-10"	17 @ 3'-7"	60'-11"
4	4	9 @ 3'-7"	32'-3"	13 @ 3'-7"	46'-7"	22 @ 3'-7"	78'-10"
5	2	5 @ 4'-7"	22'-11"	7 @ 4'-7"	32'-1"	12 @ 4'-7"	55'-0"
5	3	7 @ 4'-7"	32'-1"	11 @ 4'-7"	50'-5"	17 @ 4'-7"	77'-11"
5	4	9 @ 4'-7"	41'-3"	14 @ 4'-7"	64'-2"	22 @ 4'-7"	100'-10"
5	5	11 @ 4'-7"	50'-5"	17 @ 4'-7"	77'-11"	27 @ 4'-7"	123'-9"
6	2	5 @ 5'-7"	27'-11"	8 @ 5'-7"	44'-8"	12 @ 5'-7"	67'-0"
6	3	7 @ 5'-7"	39'-1"	11 @ 5'-7"	61'-5"	17 @ 5'-7"	94'-11"
6	4	10 @ 5'-7"	55'-10"	14 @ 5'-7"	78'-2"	23 @ 5'-7"	128'-5"
6	5	12 @ 5'-7"	67'-0"	17 @ 5'-7"	94'-11"	28 @ 5'-7"	156'-4"
6	6	14 @ 5'-7"	78'-2"	20 @ 5'-7"	111'-8"	33 @ 5'-7"	184'-3"

Follow (<2 FT Cover) table for all other sizes

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 5-09-14	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 4/17/2025	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DEGLO	M 0 / D	IOTRIAT		4 D.D.	F.A. RTE.	SECTION
	REGION 2 / DISTRICT 2 STANDARD						
SCALE:	SHEET 21	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.

PIPE GRATE SCHEDULE FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.

SLOPE OF END SECTION							
Pipe I.D.	1	:4		1:6	1:10		
Tipe I.D.	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	
15"	3 @ 0'-11"	2'-9"	4 @ 0'-11"	3'-8"	6 @ 0'-11"	5'-6"	
18"	3 @ 1'-1"	3'-3"	5 @ 1'-1"	5'-5"	7 @ 1'-1"	7'-7"	
21"	4 @ 1'-5"	5'-8"	5 @ 1'-5"	7'-1"	9 @ 1'-5"	12'-9"	
24"	5 @ 1'-7"	7'-11"	6 @ 1'-7"	9'-6"	10 @ 1'-7"	15'-10"	
30"	6 @ 2'-1"	12'-6"	8 @ 2'-1"	16'-8"	13 @ 2'-1"	27'-1"	
36"	7 @ 2'-7"	18'-1"	10 @ 2'-7"	25'-10"	15 @ 2'-7"	38'-9"	
42"	8 @ 3'-1"	24'-8"	11 @ 3'-1"	33'-11"	18 @ 3'-1"	55'-6"	
48"	9 @ 3'-7"	32'-3"	13 @ 3'-7"	46'-7"	21 @ 3'-7"	75'-3"	
54"	10 @ 4'-1"	40'-10"	14 @ 4'-1"	57'-2"	23 @ 4'-1"	93'-11"	
60"	11 @ 4'-7"	50'-5"	15 @ 4'-7"	68'-9"	25 @ 4'-7"	114'-7"	
66"	12 @ 5'-1"	61'-0"	17 @ 5'-1"	86'-5"	28 @ 5'-1"	142'-4"	
72"	13 @ 5'-7"	72'-7"	18 @ 5'-7"	100'-6"	30 @ 5'-7"	167'-6"	
78"	14 @ 6'-1"	85'-2"	20 @ 6'-1"	121'-8"	33 @ 6'-1"	200'-9"	
84"	15 @ 6'-7"	98'-9"	21 @ 6'-7"	138'-3"	35 @ 6'-7"	230'-5"	

TOTAL SHEET NO.

PIPE GRATE SCHEDULE FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.

PIPE GKA	AIL SUILDUL	E FUK PAKA	LLEL PIPE AI	KCH CULVEK	12 12 1HKU	84 DIA.
		S	LOPE OF END SEC	TION		
	Table IIA, Corrugation : 2 " x ½"					
Ding LD		L:4		1:6		L:10
Pipe I.D.	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	2 @ 1'-1"	2'-2"	3 @ 1'-1"	3'-3"	5 @ 1'-1"	5'-5"
18"	3 @ 1'-5"	4'-3"	4 @ 1'-5"	5'-8"	6 @ 1-5"	8'-6"
21"	3 @ 1'-7"	4'-9"	5 @ 1'-7"	7'-11"	7 @ 1'-7"	11'-1"
24"	4 @ 1'-11"	7'-8"	5 @ 1'-11"	9'-7"	8 @ 1'-11"	15'-4"
30"	4 @ 2'-7"	10'-4"	6 @ 2'-7"	15'-6"	10 @ 2'-7"	25'-10"
36"	5 @ 3'-1"	15'-5"	7 @ 3'-1"	21'-7"	12 @ 3'-1"	37'-0"
42"	6 @ 3'-9"	22'-6"	9 @ 3'-9"	33'-9"	14 @ 3'-9"	52'-6"
48"	7 @ 4'-5"	30'-11"	10 @ 4'-5"	44'-2"	16 @ 4'-5"	70'-8"
54"	8 @ 4'-11"	39'-4"	11 @ 4'-11"	54'-1"	18 @ 4'-11"	88'-6"
60"	8 @ 5'-7"	44'-8"	12 @ 5'-7"	67'-0"	20 @ 5'-7"	111'-8"
66"	9 @ 6'-1"	54'-9"	13 @ 6'-1"	79'-1"	22 @ 6'-1"	133'-10"
72"	10 @ 6'-7"	65'-10"	15 @ 6'-7"	98'-9"	24 @ 6'-7"	158'-0"
78"	-	-	-	-	-	-
84"	-	-	-	-	-	-

PIPE GRATE SCHEDULE FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.

	SLOPE OF END SECTION					
Pipe I.D.	1	.:4		1:6	1	.:10
ripe i.b.	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	-	-	-	-	-	-
18"	-	-	-	-	-	-
21"	-	-	-	_	-	-
24"	-	-	-	-	-	-
30"	-	-	-	-	-	-
36"	6 @ 2'-11"	17'-6"	8 @ 2'-11"	23'-4"	13 @ 2'-11"	37'-11"
42"	7 @ 3'-5"	23'-11"	10 @ 3'-5"	34'-2"	15 @ 3'-5"	51'-3"
48"	8 @ 4'-1"	32'-8"	11 @ 4'-1"	44'-11"	18 @ 4'-1"	73'-6"
54"	9 @ 4'-7"	41'-3"	12 @ 4'-7"	55'-0"	20 @ 4'-7"	91'-10"
60"	9 @ 5'-1"	45'-9"	14 @ 5'-1"	71'-2"	22 @ 5'-1"	111'-10"
66"	10 @ 5'-9"	57'-6"	15 @ 5'-9"	86'-3"	24 @ 5'-9"	138'-0"
72"	11 @ 6'-5"	70'-7"	16 @ 6'-5"	102'-8"	26 @ 6'-5"	166'-10"
78"	12 @ 6'-11"	83'-0"	17 @ 6'-11"	117'-7"	28 @ 6'-11"	193'-8"
84"	12 @ 7'-7"	91'-0"	18 @ 7'-7"	136'-6"	30 @ 7'-7"	227'-6"

)EL: 14pt1_sheet4 ; NAME: DISTRICT 2 STAND,

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 5-09-14	l
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 4/17/2025	DATE -	REVISED -	

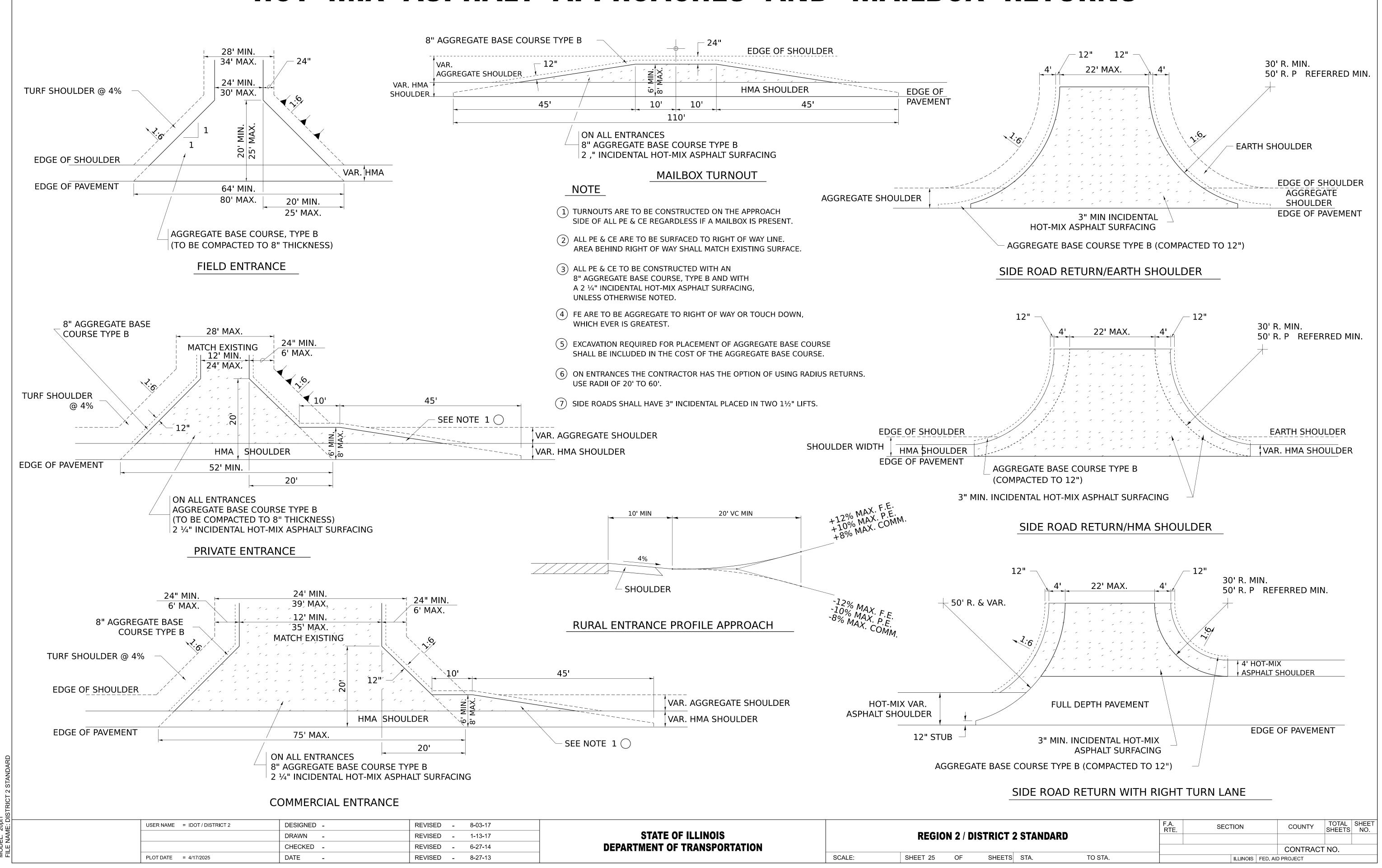
PIPE GRATE SCHEDULE FOR PARALLEL ELLIPTICAL PIPE CULVERTS 15" THRU 72" DIA.

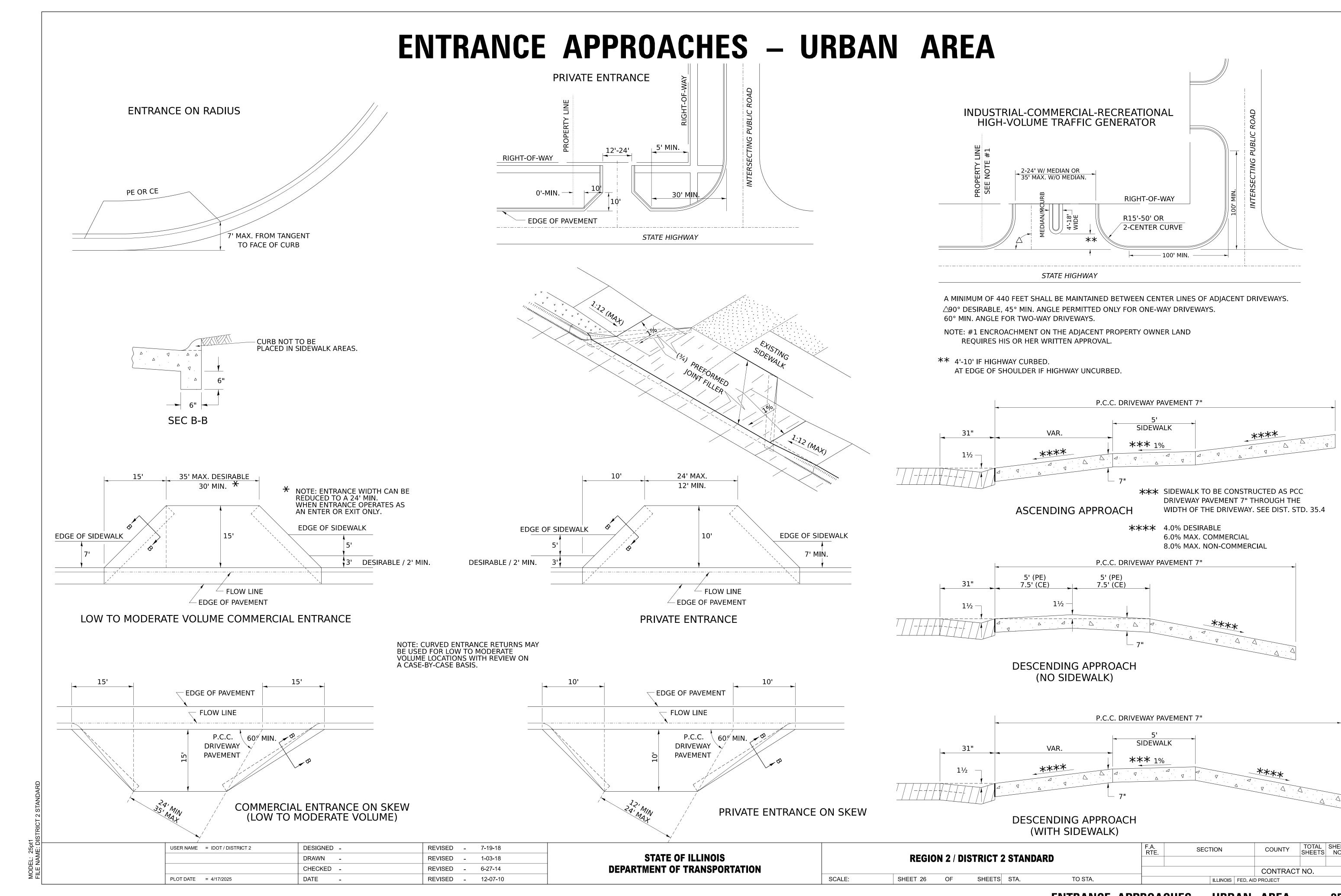
	SLOPE OF END SECTION							
Dina I D	1	:4		1:6	1:10			
Pipe I.D.	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe		
15"	3 @ 2'-7"	7'-9"	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"		
18"	3 @ 2'-7"	7'-9"	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"		
21"	5 @ 3'-3"	16'-3"	7 @ 3'-3"	22'-9"	12 @ 3'-3"	39'-0"		
24"	5 @ 3'-3"	16'-3"	7 @ 3'-3"	22'-9"	12 @ 3'-3"	39'-0"		
27"	6 @ 3'-7"	21'-6"	8 @ 3'-7"	28'-8"	13 @ 3'-7"	46'-7"		
30"	6 @ 3'-11"	23'-6"	9 @ 3'-11"	35'-3"	14 @ 3'-11"	54'-10"		
36"	7 @ 4'-7"	32'-1"	10 @ 4'-7"	45'-10"	16 @ 4'-7"	73'-4"		
42"	8 @ 5'-5"	43'-4"	11 @ 5'-5"	59'-7"	18 @ 5'-5"	97'-6"		
48"	9 @ 6'-1"	54'-9"	13 @ 6'-1"	79'-1"	20 @ 6'-1"	121'-8"		
54"	10 @ 6'-9"	67'-6"	14 @ 6'-9"	94'-6"	23 @ 6'-9"	155'-3"		
60"	11 @ 7'-7"	83'-5"	15 @ 7'-7"	113'-9"	25 @ 7'-7"	189'-7"		
66"	11 @ 8'-3"	90'-9"	17 @ 8'-3"	140'-3"	27 @ 8'-3"	222'-9"		
72"	12 @ 8'-11"	107'-0"	18 @ 8'-11"	160'-6"	30 @ 8'-11"	267'-6"		

MODEL: 14pt1_sheet5 FILE NAME: DISTRICT 2 STAND.

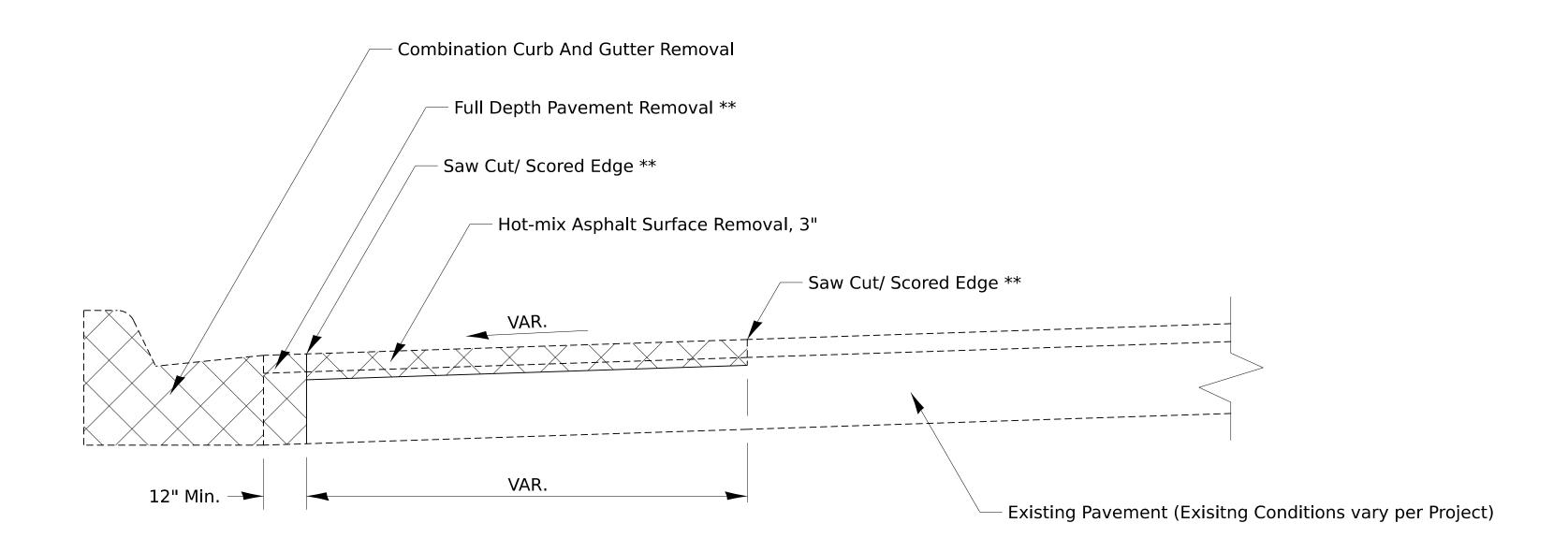
USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 5-09-14				F.A. RTF	SECTION	COUNTY TOTAL SHEET SHEETS NO
	DRAWN -	REVISED -	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	1112		5112275 1161
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 24 OF SHEETS STA. TO STA.		ILLINOIS F	ED. AID PROJECT

HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS

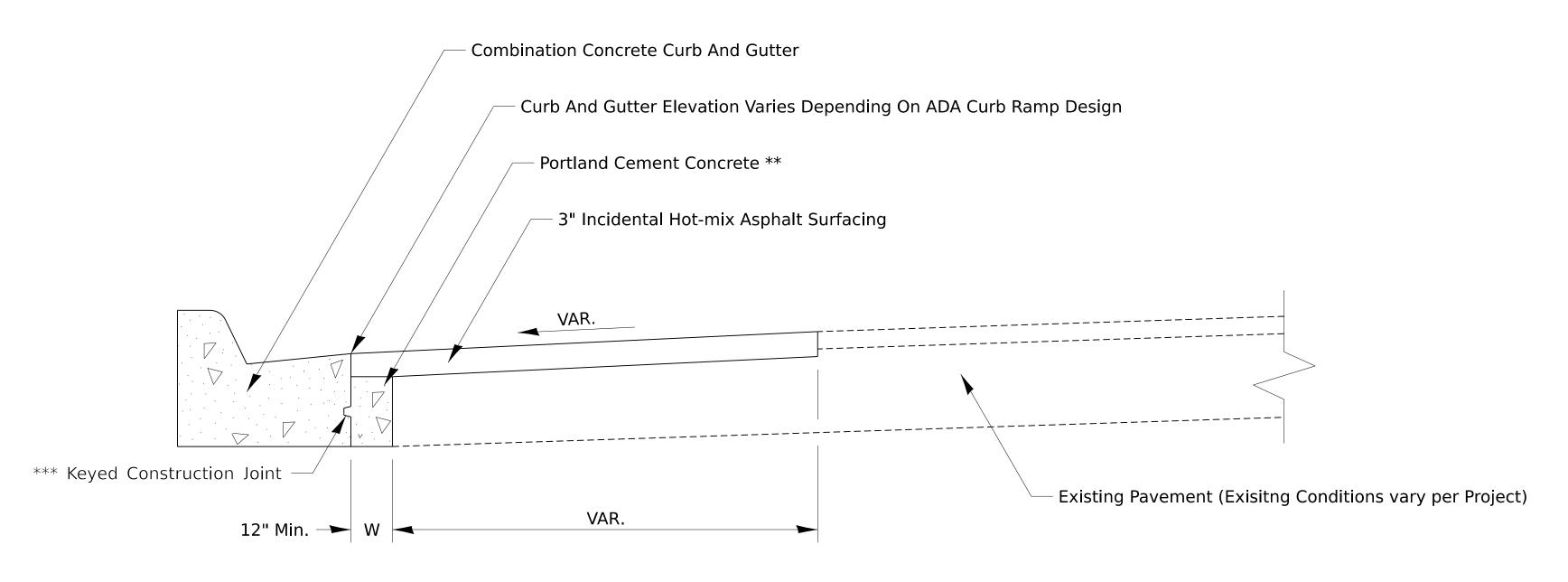




ADA CURB RAMP PAVEMENT REMOVAL AND REPLACEMENT



PAVEMENT REMOVAL



PAVEMENT REPLACEMENT

GENERAL NOTES:

SEE STANDARD 606001 FOR CONCRETE CURB AND COMBINATION CURB AND GUTTER DETAILS NOT SHOWN.

SEE STANDARD 420001 FOR KEYED CONSTRUCTION JOINT DETAILS

SAW CUTTING/ SCORING SHALL BE INCLUDED IN THE UNIT COST OF HOT-MIX ASPHALT SURFACE REMOVAL.

FULL DEPTH PAVEMENT REMOVAL SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CURB AND GUTTER REMOVAL.

PORTLAND CEMENT CONCRETE NEEDED TO FILL IN THE FORMWORK AREA IN FRONT OF THE COMBINATION CURB AND GUTTER SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CONCRETE CURB AND GUTTER.

IF THERE IS A CHANGE IN RADIUS AND THE DISTANCE BETWEEN THE NEW COMBINATION CURB AND GUTTER AND THE EXISTING PAVEMENT IS 4FT OF GREATER, THE PCC IN FRONT OF THE CURB AND GUTTER SHALL BE TIED TO THE NEW COMBINATION CURB AND GUTTER AND THE EXISTING PAVEMENT WITH TIE BARS. TIE BARS SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CONCRETE CURB AND GUTTER.

CONSTRUCTION SEQUENCE

- 1. REMOVE EXISTING FULL DEPTH PAVEMENT AND CURB AND GUTTER
- 2. FORM AND POUR COMBINATION CONCRETE CURB AND GUTTER
- 3. REPLACE FULL DEPTH PAVEMENT WITH PORTLAND CEMENT CONCRETE

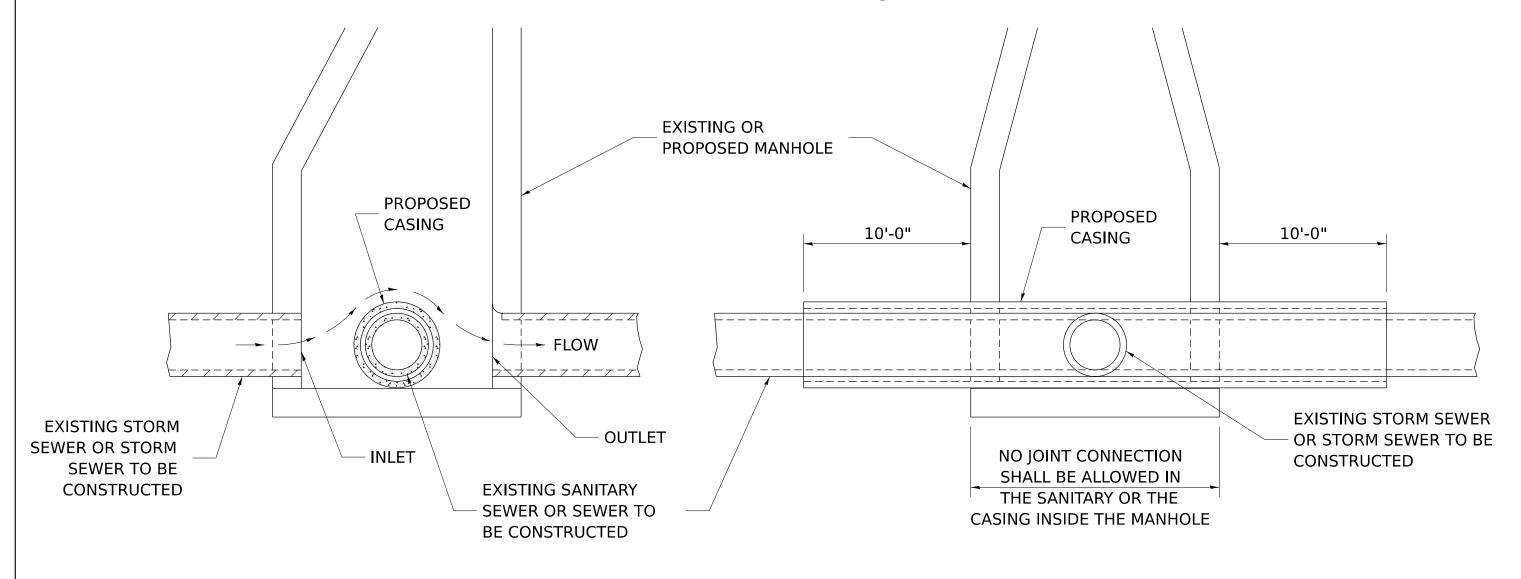
 (UP TO 3" FROM FINISHED SURFACE ELVATION TO ALLOW FOR HMA OVERLAY)
- 4. HOT-MIX ASPHALT REMOVAL AND REPLACEMENT.

NOTES:

- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- ** COST INCLUDED IN OTHER PAY ITEMS PER GENERAL NOTES
- *** IF W > 24" TIE BARS SHALL BE USED INSTEAD OF A KEYED CONSTRUCTION JOINT

TOTAL SHEET NO. DESIGNED 1-10-22 USER NAME = IDOT / DISTRICT 2 REVISED **SECTION** COUNTY STATE OF ILLINOIS **REGION 2 / DISTRICT 2 STANDARD** DRAWN REVISED **DEPARTMENT OF TRANSPORTATION** REVISED CHECKED -CONTRACT NO. SCALE: TO STA. PLOT DATE = 4/17/2025DATE REVISED SHEET 27 SHEETS STA. ILLINOIS | FED. AID PROJECT

SEWER AND WATER MAIN CROSSINGS



ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC

CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

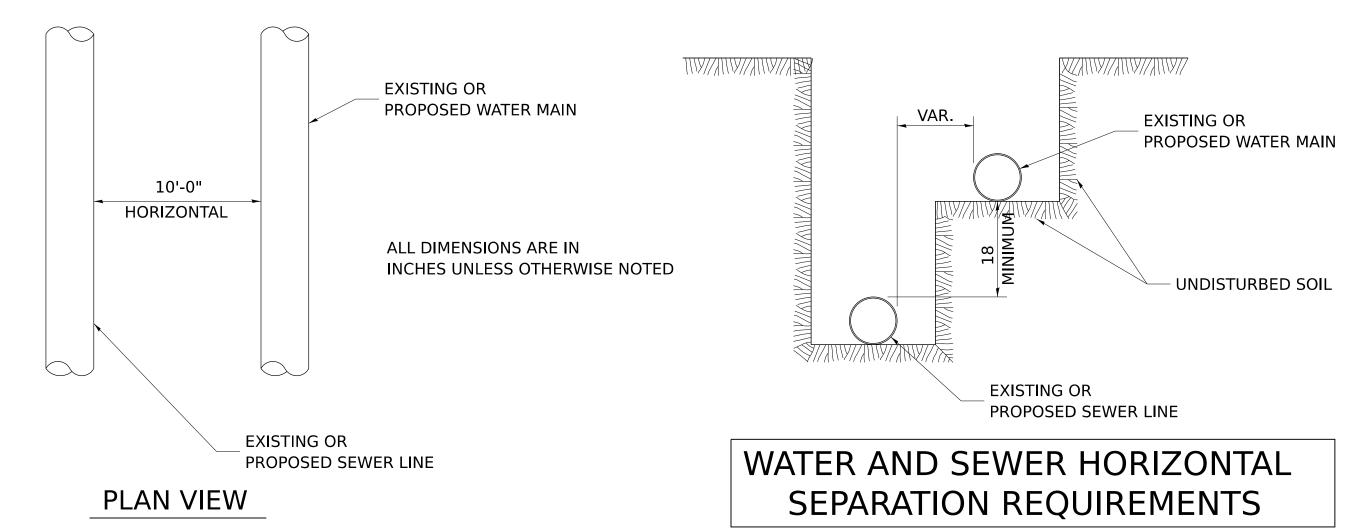
AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

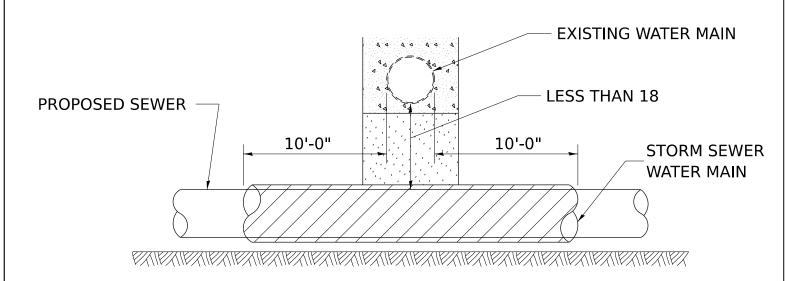
WHEN PROPOSED SEWER (OR WATER) IS
LOCATED 10'-0" OR MORE
FROM EXISTING WATER (OR SEWER)
NO SPECIAL CONSTRUCTION REQUIRED.

WHEN PROPOSED SEWER (OR WATER) IS
LOCATED LESS THAN 10'-0"
FROM EXISTING WATER (OR SEWER)
DETAILS BELOW SHALL APPLY.



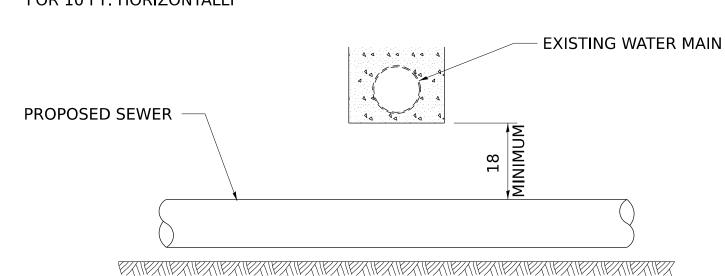
POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN
TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

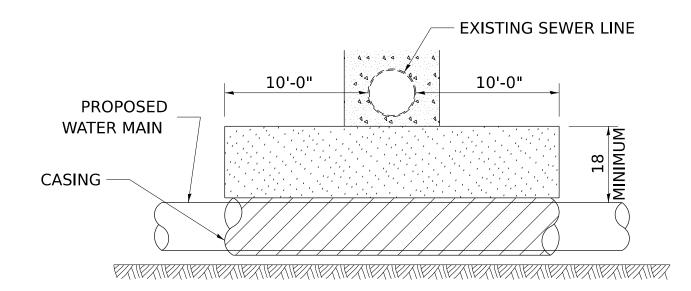
MAINTAIN 18 MINIMUM VERTICAL SEPARATION FOR 10 FT. HORIZONTALLY



ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE NOTED

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT

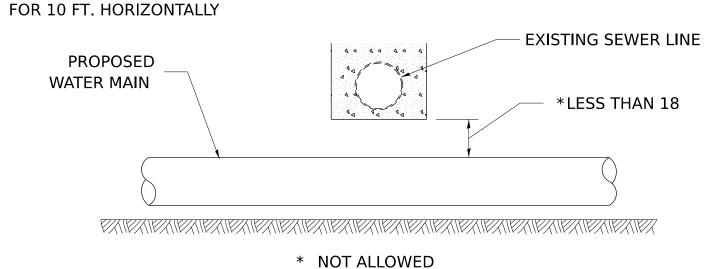
PLACE TRENCH BACKFILL FOR 10 FT. ON EITHER SIDE OF SEWER LINE



CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN
TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

MAINTAIN 18 MINIMUM VERTICAL SEPARATION



MUST MAINTAIN 18 VERTICAL SEPARATION

ALL DIMENSIONS ARE IN INCHES

UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE

POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER

PROPOSED WATER MAIN

TRENCH BACKFILL

EXISTING SEWER LINE

CASING

EXISTING SEWER LINE

LESS THAN 18

CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN INCHES
UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN
ABOVE EXISTING SEWER LINE

SCALE:

PROVIDE ADEQUATE SUPPORT FOR SEWER TO WATER 10'-0" 10'-0" PROPOSED TRENCH SEWER WIDTH STORM SEWER TRENCH BACKFILL WATER MAIN MINIMUM 18 EXISTING WATER MAIN ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED **EXISTING WATER MAIN BELOW**

PROPOSED SEWER LINE WITH MINIMUM

18 VERTICAL SEPARATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

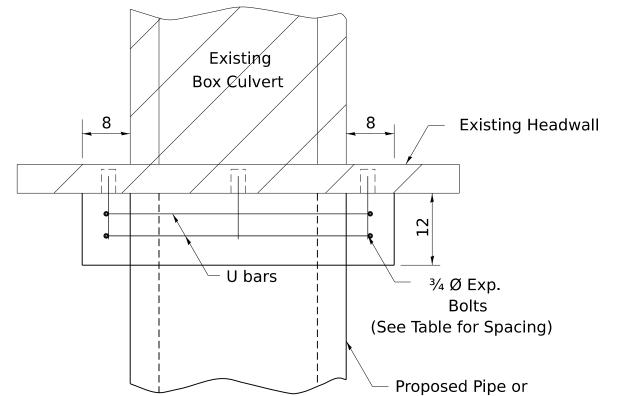
REGION 2 / DISTRICT 2 STANDARD

SHEET 28 OF SHEETS STA. TO STA.

CONCRETE COLLARS FOR PIPE OR BOX CULVERT EXTENSIONS

Bill of Materials

CONCRETE **EXPANSION** Ա bar dimensions U bar dimensions h bar BARS BOLTS 3/4" COLLAR Quantity Quantity LBS EACH Cu. Yds. Length Length Quantity Total All h bars 18 Long



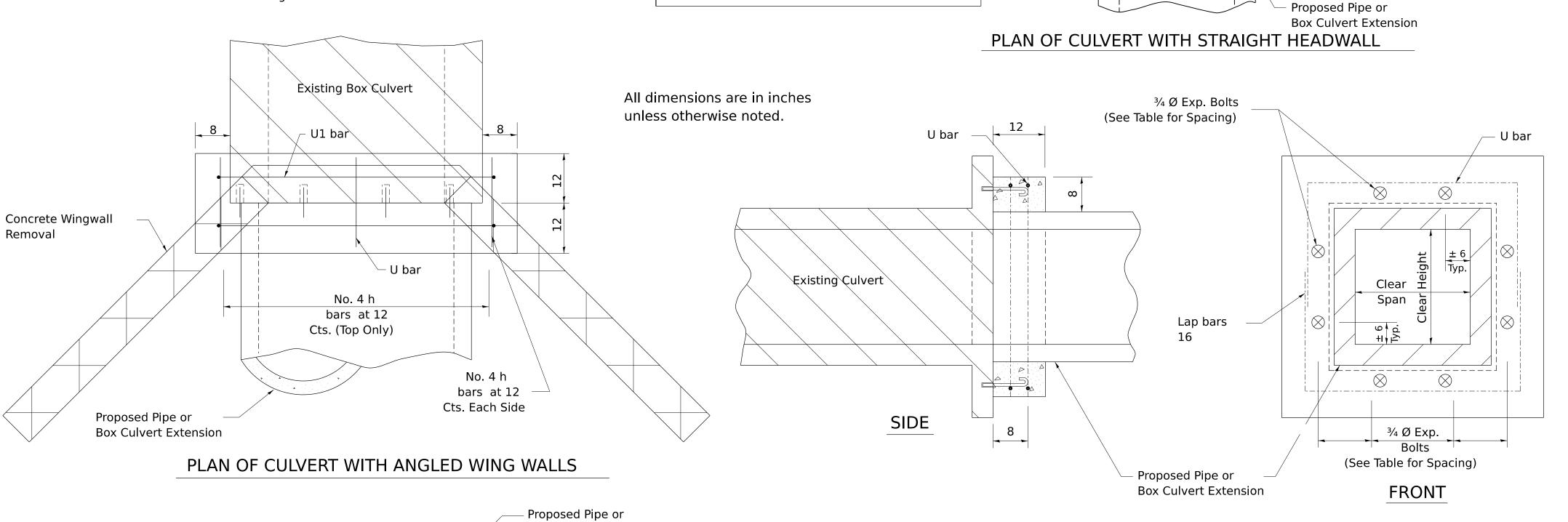
General Notes

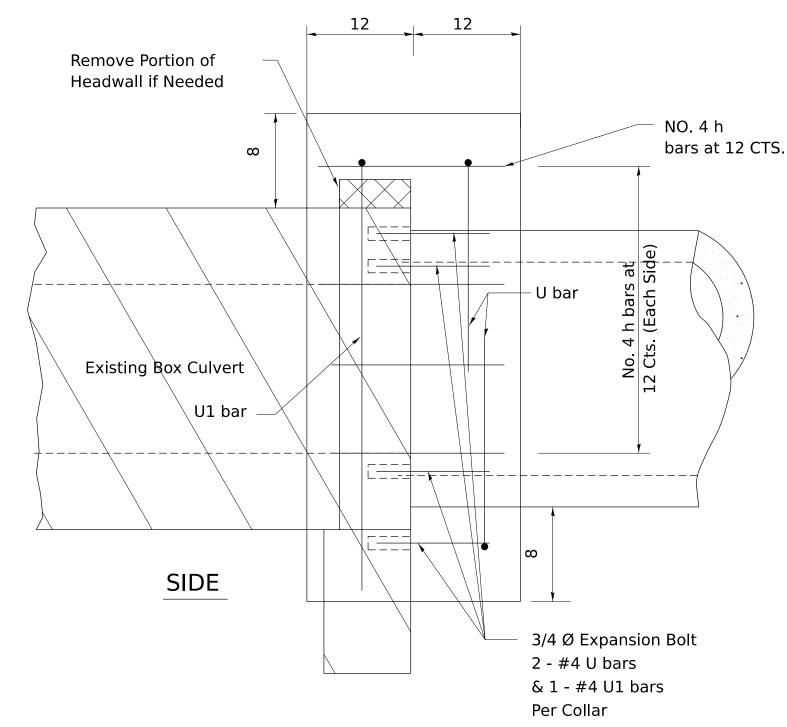
Concrete Collars shall be constructed of Class SI Concrete in accordance with Section 503 of the Standard Specifications

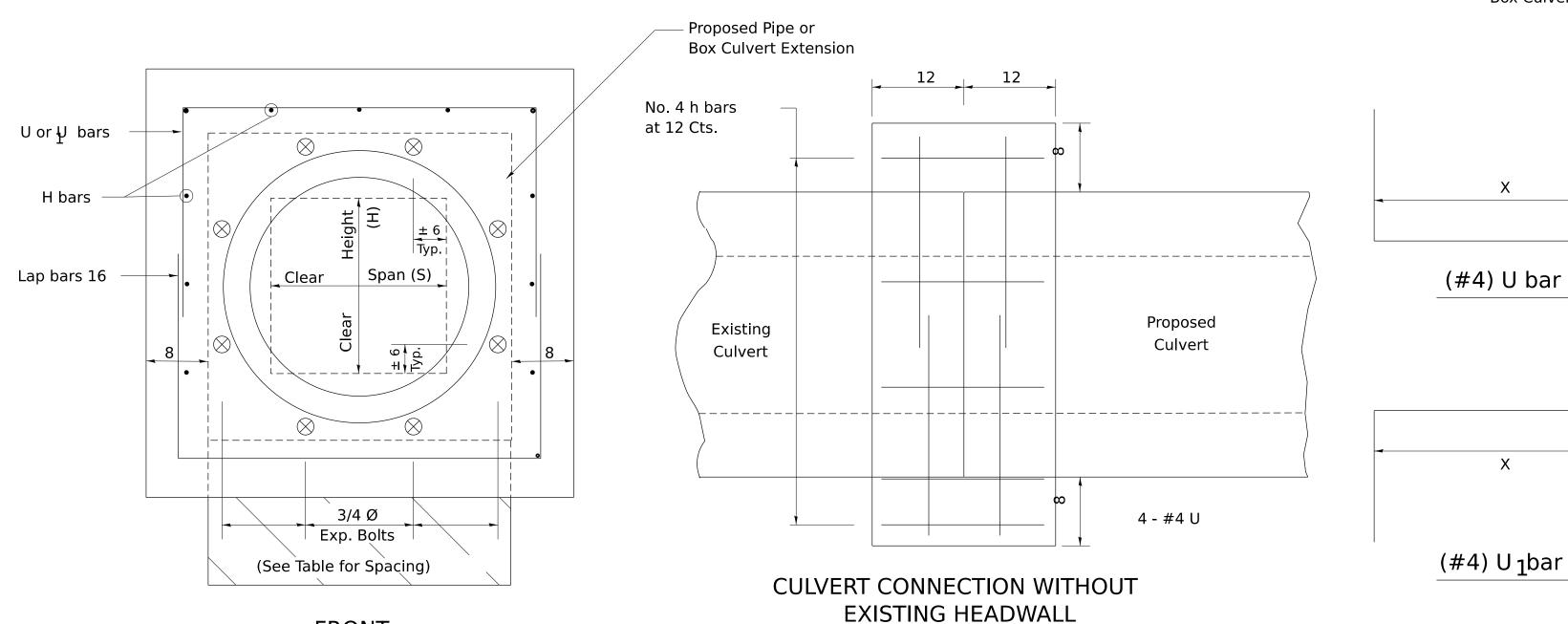
Reinforcement bars shall conform to Section 508 of the Standard Specifications.

Expansion bolts shall be 3/4 Ø hooked bolts and shall conform to Section 540 of the Standard Specifications.

The concrete will be paid for at the contract unit price per cubic yard for CONCRETE COLLAR. Reinforcement will be paid for at the contract unit price per pound for REINFORCEMENT BARS. Expansion Bolts, when required, will be paid for at the contract unit price each for EXPANSION BOLTS ¾ inch, which price shall include furnishing, drilling holes, and installing the expansion bolts complete in place. These bolts shall extend at least 9 inches into the new concrete.







REVISED

REVISED -

6-27-14

10-17-11

FOR EXPANSION BOLTS NUMBER OF EXPANSION BOLTS REQUIRED PER SIDE EXTENSIONS ≤ 15' EXTENSIONS > 15' NUMBER * **SPACING** NUMBER stSPACING H or S ** 24 30 18 18 36 24 24 18 18 48 16 60 24 72 5 15 20 84 18 24 96 17 21 24 108 19 120 18 21 132 17 24 144 19 22

PLACEMENT DETAILS

extended 18' at one end only. From table find

6' x 4' box culvert to be

Example:

6' side requires 4 - 3/4" Ø expansion bolts at 20" cts.
4' side requires 3 - 3/4" Ø expansion bolts at 18" cts.

Total Number required $(4+3)2 = 14 - \frac{3}{4}$ Ø expansion bolts.

* Expansion bolts based on non-skewed culverts * Minimum one expansion bolt at each corner

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-18-17
	DRAWN -	REVISED - 1-05-16

CHECKED

DATE

FRONT

PLOT DATE = 4/17/2025

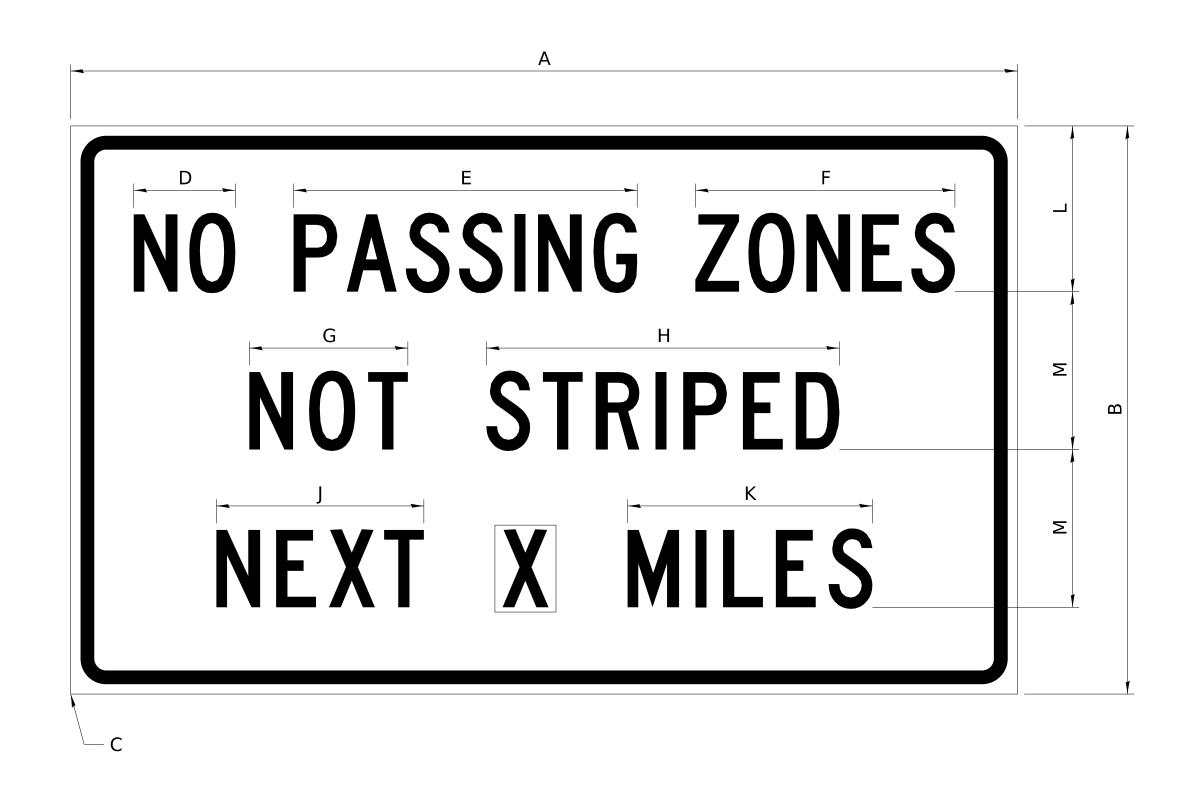
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

SCALE:

DEGLO	M 0 / D	IOTRICT O	OTAND	ADD	F.A. RTE.	
REGIO	N 2 / D	ISTRICT 2	SIAND	ARD		
SHEET 29	OF	SHEETS	STA.	TO STA.		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD G20–I100



LEGEND AND BORDER BACKGROUND

ORANGE

NON-REFLECTORIZED REFLECTORIZED

SICN SIZE					[OIMEN	ISIONS	5				
SIGN SIZE	Α	В	С	D	E	F	G	Н	J	К	L	М
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SER	IES BY L	INE	MARGIN	BORDER
SIGN SIZE	1	2	3	MARGIN	BORDER
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

GENERAL NOTES

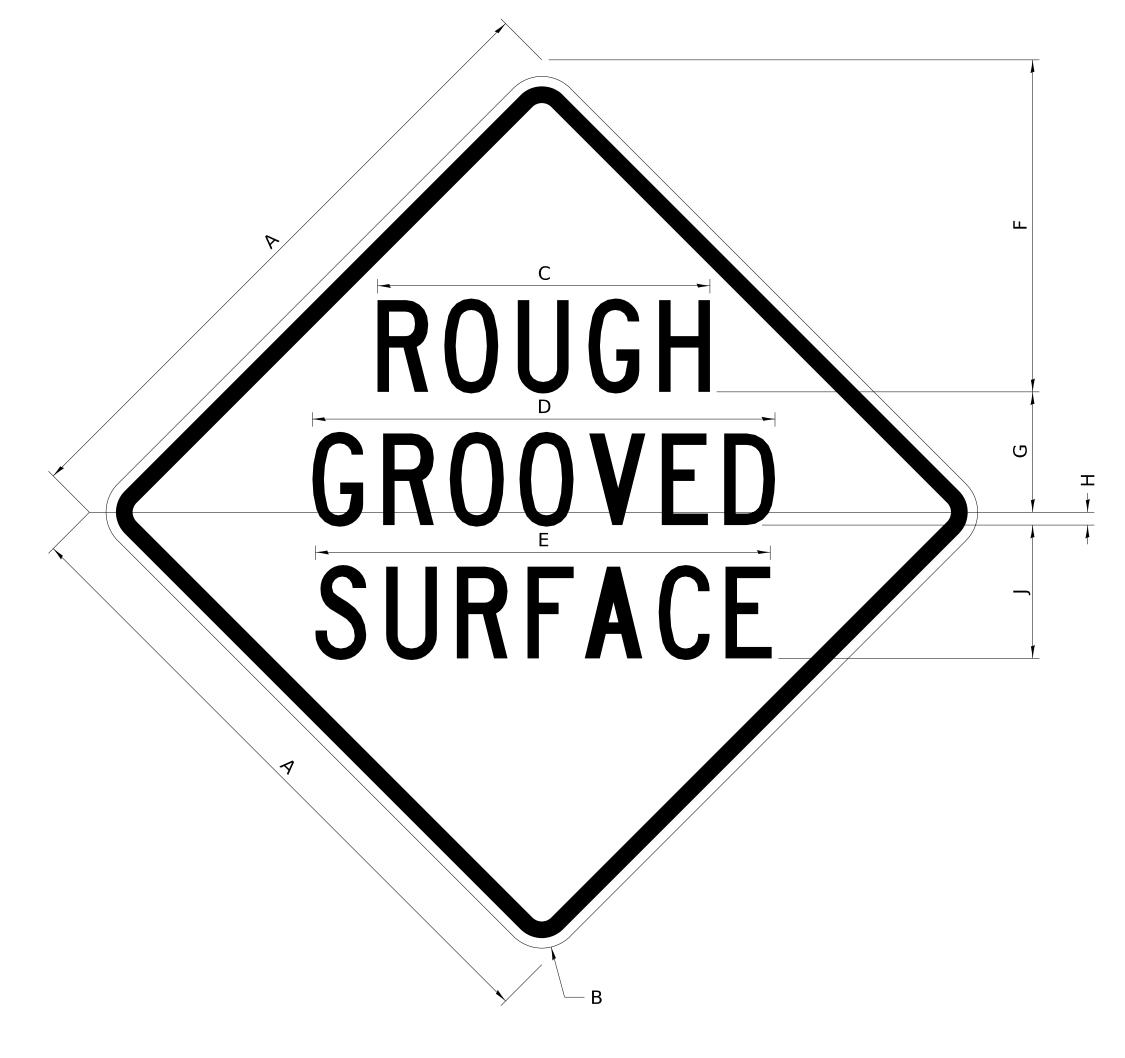
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

ILLINOIS STANDARD W8–I107



LEGEND AND BORDER COLOR BACKGROUND

BLACK ORANGE

NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE				DIM	IENSIC	ONS			
SIGN SIZE	Α	A B C D E F G					Н	J	
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

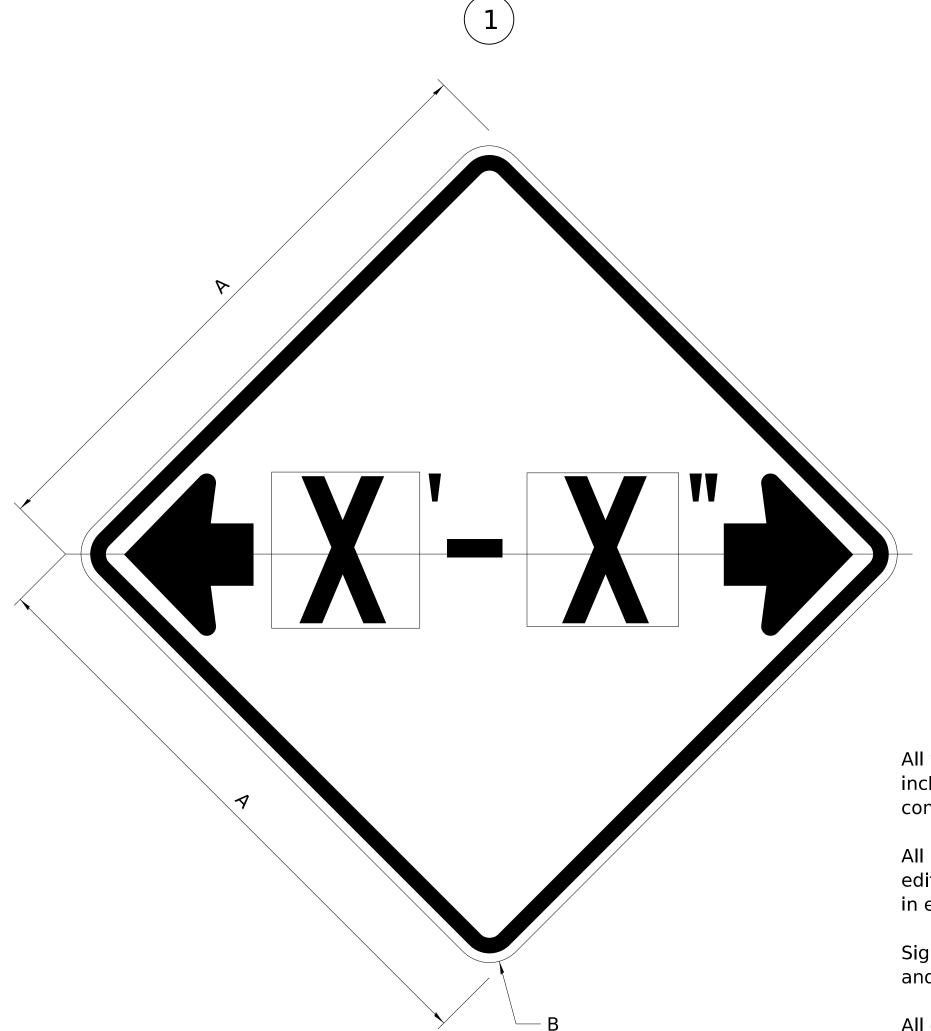
SIGN SIZE	SER	IES BY L	INE	MARGIN	PODDED	
SIGN SIZE	1	2	3	MARGIN	BORDER	
48 x 48	7C	7C	7C	1.250	0.750	

Sign not to scale

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 3-02-16					F.A.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	REGION 2 / DISTRICT 2 STANDARD		IXIL.			OFFICE TO INO.	
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT	NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 30 OF SHEETS STA.	TO STA.		ILLINOIS FED	. AID PROJECT	

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD W12–I102



GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR

LEGEND AND BORDER BACKGROUND

BLACK FL ORANGE NON-REFLECTORIZED REFLECTORIZED

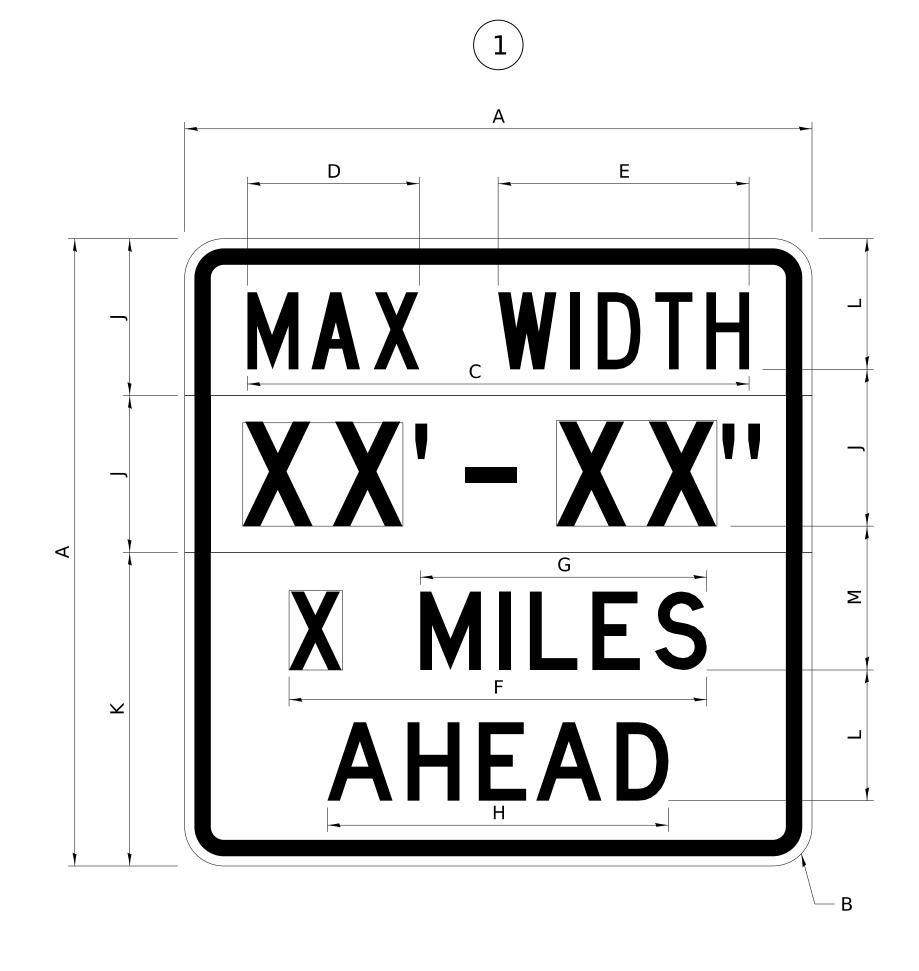
SICN SIZE	DIMEN	ISIONS
SIGN SIZE 48 x 48	Α	В
48 x 48	48.00	3.00

Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

CICN CIZE	SERIES BY LINE	MADCINI	PODDED
SIGN SIZE	GN SIZE 1	MARGIN	BORDER
48 x 48	12C	0.750	1.250

Sign not to scale

ILLINOIS STANDARD W12–I103



COLOR

LEGEND AND BORDER
BACKGROUND
BACKGROUND (WIDTH)

BLACK WHITE FL ORANGE NON-REFLECTORIZED REFLECTORIZED REFLECTORIZED

SIGN SIZE		DIMENSIONS													
	Α	В	С	D	Е	F	G	I	J	K	L	М			
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00			

SICN SIZE		SERIES	BY LINE		MARGIN	BORDER
SIGN SIZE 1	2	3	4	MARGIN	DORDER	
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 3-02-16									F.A. RTE	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS				2 / DIS	STRICT	2 STANDA	RD	TATE:			OFFICE	110.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION										CONTRA	ACT NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 31	(OF	SHEETS	STA.	TO STA.		ILLINOIS F	ED. AID PROJECT		

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS



COLOR

LEGEND AND BORDER BACKGROUND

BLACK ORANGE

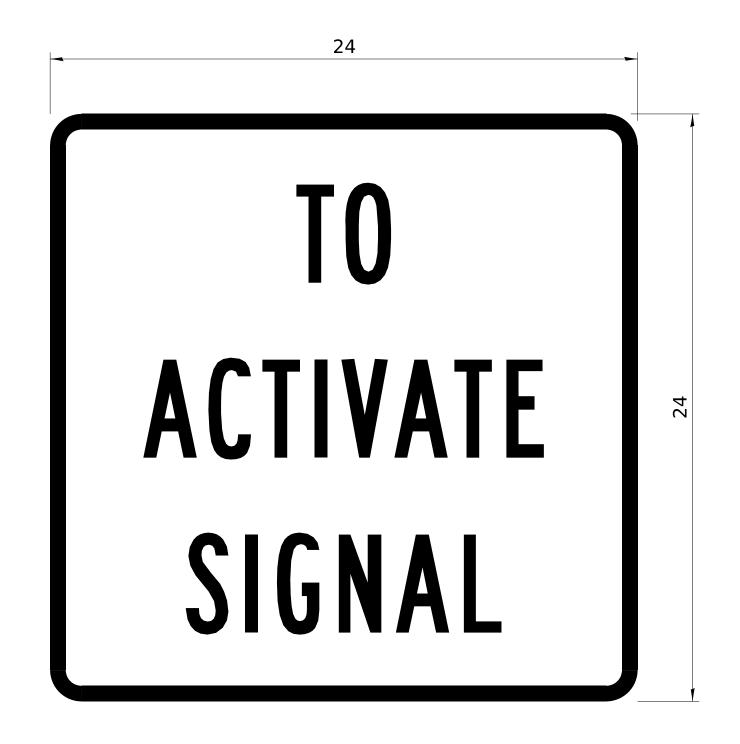
NON-REFLECTORIZED REFLECTORIZED

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border; [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D; Table of letter and object lefts.

N 11.7	O 18.1	O 30.0	V 36.2	E 42.8	R 48.4	S 54.4	l 60.7	Z 63.5	E 69.5	- 80.8				
O 2.6	V 8.6	E 15.0	R 20.4	W 26.2	E 33.4	 38.8	G 41.3	H 47.4	T 53.2	L 64.5	O 69.9	A 75.9	D 82.9	S 88.7
X 7.6	X 13.6	M 25.3	I 32.3	L 35.1	E 40.6	S 46.2	A 57.9	H 65.1	E 71.4	A 76.6	D 83.7			

Sign not to scale

STOP LINE SIGN FOR TEMPORARY SIGNALS



LEGEND AND BORDER BACKGROUND

BLACK WHITE

NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	SERIES BY LINE								
SIGN SIZE	1	2	3						
24 x 24	4C	4C	4C						

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

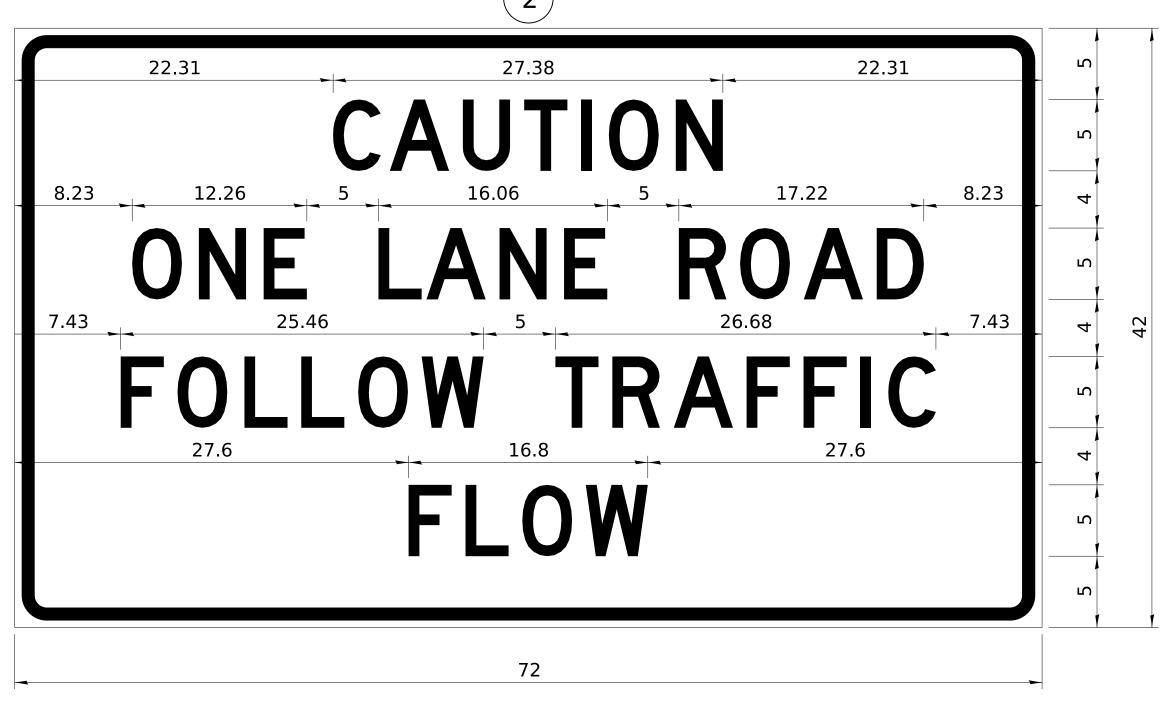
Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 3-02-16								F.A. RTE.	SECTION	COUNTY	TOTAL SI SHEETS	
	DRAWN -	REVISED -	STATE OF ILLINOIS	REGION 2 / DISTRICT 2 STANDARD										
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION							CONTRACT NO			T NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 32	OF	SHEETS	S STA.		TO STA.		ILLINOIS FED	. AID PROJECT	

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS

WORK ZONE SIGN DETAILS



LEGEND AND BORDER

BLACK ORANGE

NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" IndenT; [CAUTION] D; [ONE LANE ROAD] D; [FOLLOW TRAFFIC] D; [FLOW] D

This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

	С		Α		U		Т				0		N	
22.31	3.36	0.62	4.18	0.94	3.36	0.94	3.04	0.94	0.78	1.17	3.52	1.17	3.36	22.31

	0		N		Е
8.23	3.51	1.17	3.36	1.18	3.04

	L		Α		N		Е
5.00	3.05	0.31	4.18	0.94	3.36	1.17	3.05

	R		0		Α		D	
5.00	3.36	0.93	3.52	0.94	4.18	0.93	3.36	8.23

	F		О		L		L		0		W
7.43	3.04	0.94	3.52	1.17	3.04	0.94	3.05	0.94	3.51	0.94	4.37

5.00 3.05 0.94 3.36 0.94 4.18 0.93 3.05 0.94 3.04 0.94 0.78 1.18 3.35 7.4		T		R		Α		F		F				С	
	5.00	3.05	0.94	3.36	0.94	4.18	0.93	3.05	0.94	3.04	0.94	0.78	1.18	3.35	7.43

	F		L		0		W	
27.60	3.05	0.94	3.04	0.94	3.52	0.93	4.38	27.60

Sign not to scale

DESIGNED -REVISED - 3-02-16 USER NAME = IDOT / DISTRICT 2 DRAWN REVISED CHECKED -REVISED PLOT DATE = 4/17/2025 DATE REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES

All work to furnish and install these signs shall be

control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book"

Signs shall meet the applicable portions of Sections 701

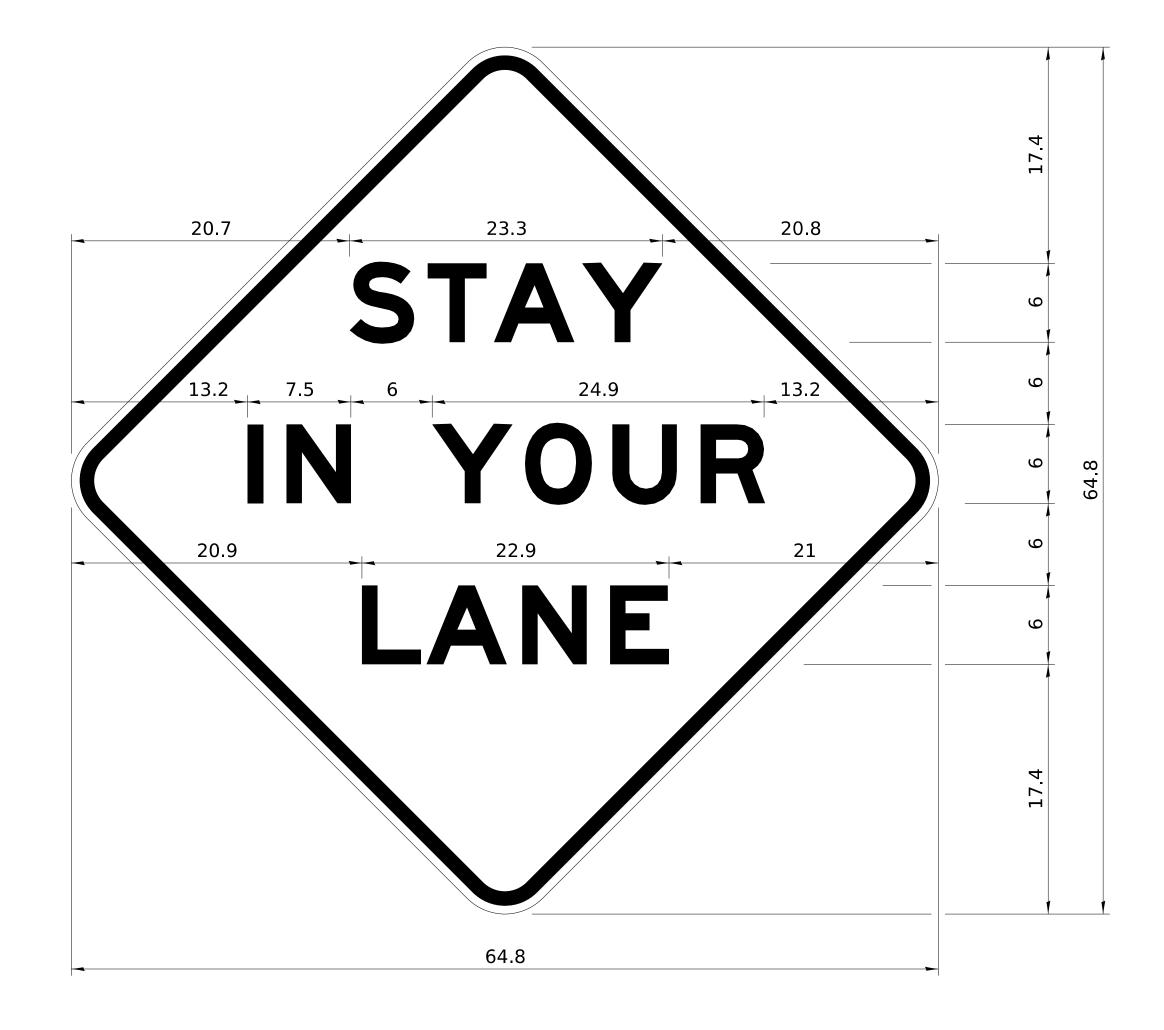
All dimensions are in inches unless otherwise noted.

included in the cost of the specified traffic

in effect on the date of invitation for bids.

and 720 of the Standard Specifications.

STAY IN YOUR LANE



BACKGROUND

LEGEND AND BORDER

BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent; "STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

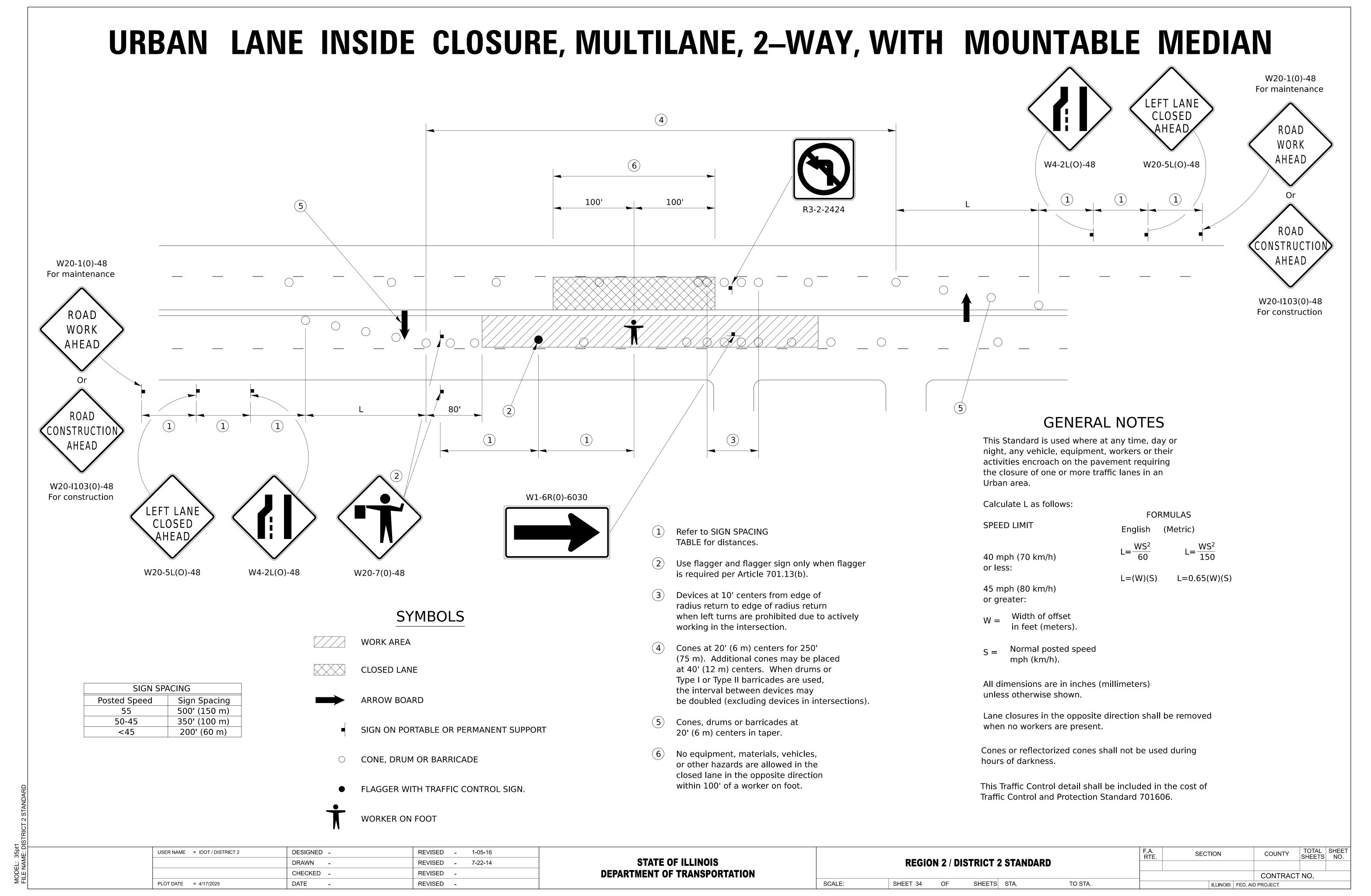
Table of Letter and Object Lefts

S 20.7	T 26.8	A 31.6	Y 38.0		
	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

L	Α	N	Е
20.9	25.8	33.1	39.4

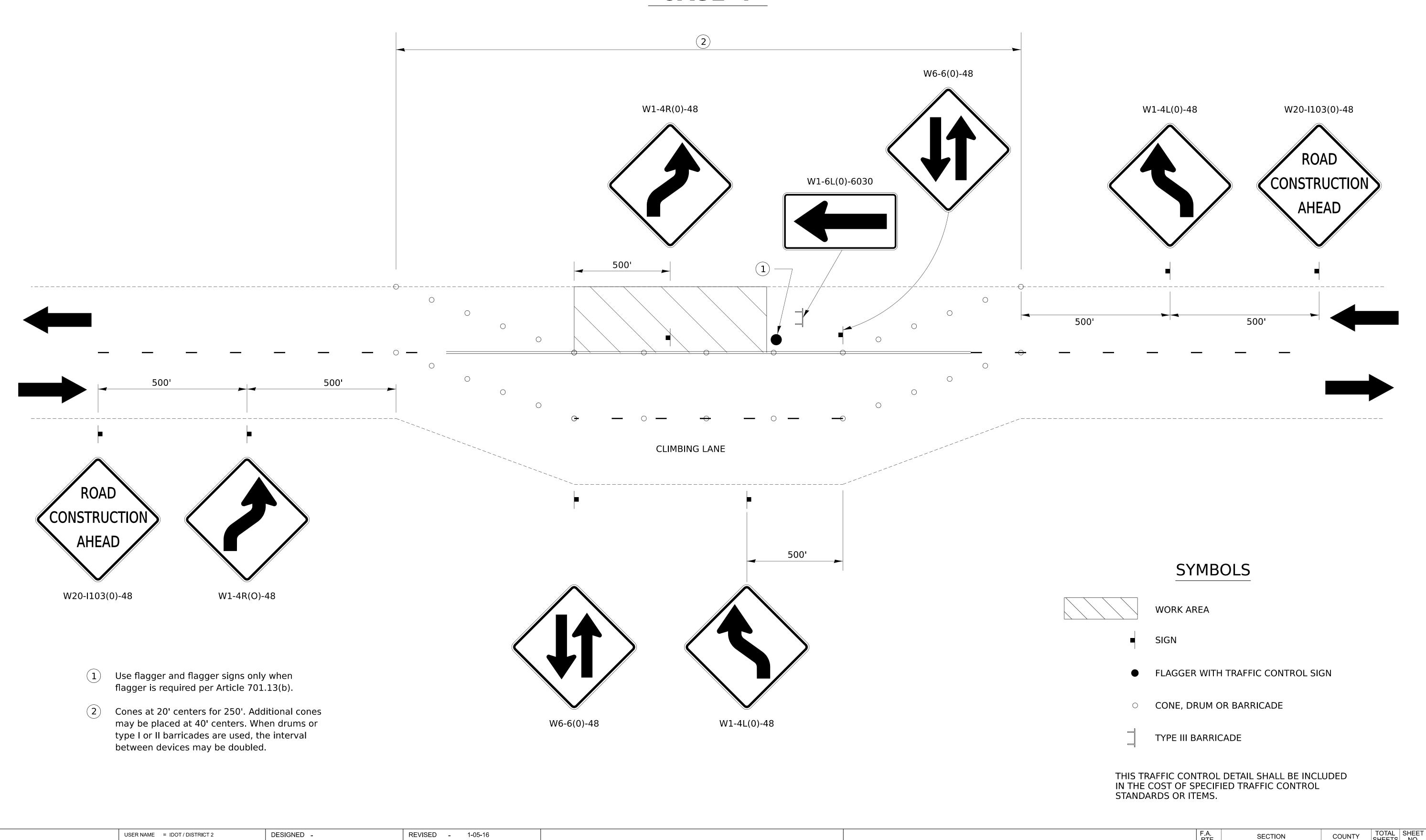
Sign not to scale

		SHEETS NO
REGION 2 / DISTRICT 2 STANDARD		
	CONTRACT	NO.
SCALE: SHEET 33 OF SHEETS STA. TO STA.	OIS FED. AID PROJECT	



TEMPORARY ROAD CLOSURE EXPRESSWAY **MESSAGE BOARD CONSTRUCTION ZONE** R11-2 TRAFFIC ROAD TYPE II BARRICADES OR DRUMS **CLOSED** AT 40' CENTERS 1000' TAPER 1000' SHIFTING TAPER **DIRECTION INDICATOR AT 40' CENTERS** AT 40' CENETERS ARROW BOARD 1000' MININMUM W1-4R(0)-48 **GENERAL NOTES** 500' **SYMBOLS** 1. MAINTENANCE OF TRAFFIC IS ACCORDING TO STANDARDS W20-7(0)-48 701400, AND 701401 (NIGHT) OR 701406 (DAY ONLY). 2. TYPE II BARRICADES OR DRUMS AT EXIT RAMP WITH LIGHTS AT 20' CENTERS (NO LESS THAN FOUR DRUMS). DIRECTION INDICATOR BARRICADE WITH LIGHT ROAD TYPE II BARRICADE OR DRUM WITH LIGHT **CLOSED** FLAGGER WITH TRAFFIC CONTROL SIGN R11-2 TYPE III BARRICADE WITH FLASHERS PORTABLE CHANGEABLE MESSAGE SIGN ARROW BOARD SIGNING ACCORDING TO SPECIFIED STANDARDS COUNTY TOTAL SHEET NO. DESIGNED -REVISED 4-20-17 USER NAME = IDOT / DISTRICT 2 **STATE OF ILLINOIS** REGION 2 / DISTRICT 2 STANDARD DRAWN -1-05-16 **DEPARTMENT OF TRANSPORTATION** CHECKED -8-27-13 CONTRACT NO. TO STA. SCALE: SHEET 35 PLOT DATE = 4/17/2025 ILLINOIS FED. AID PROJECT

TRAFFIC CONTROL FOR THREE LANE SECTION CASE 1



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

REVISED -

REVISED -

REVISED - 7-30-13

DRAWN -

CHECKED -

DATE -

PLOT DATE = 4/17/2025

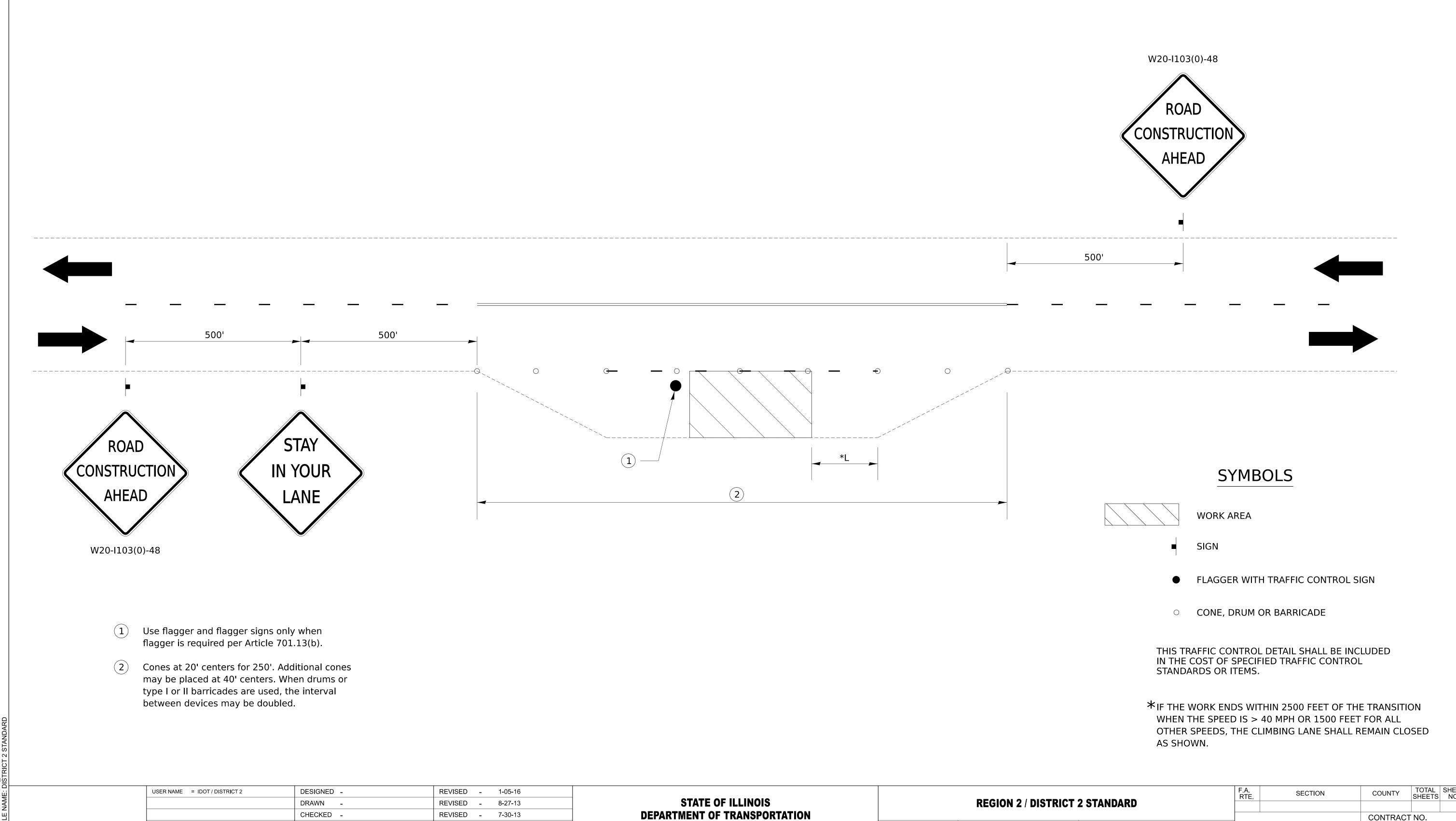
8-27-13

REGION 2 / DISTRICT 2 STANDARD

ILLINOIS FED. AID PROJECT

CONTRACT NO.

TRAFFIC CONTROL FOR THREE LANE SECTION CASE 2



PLOT DATE = 4/17/2025

DATE -

REVISED -

TO STA.

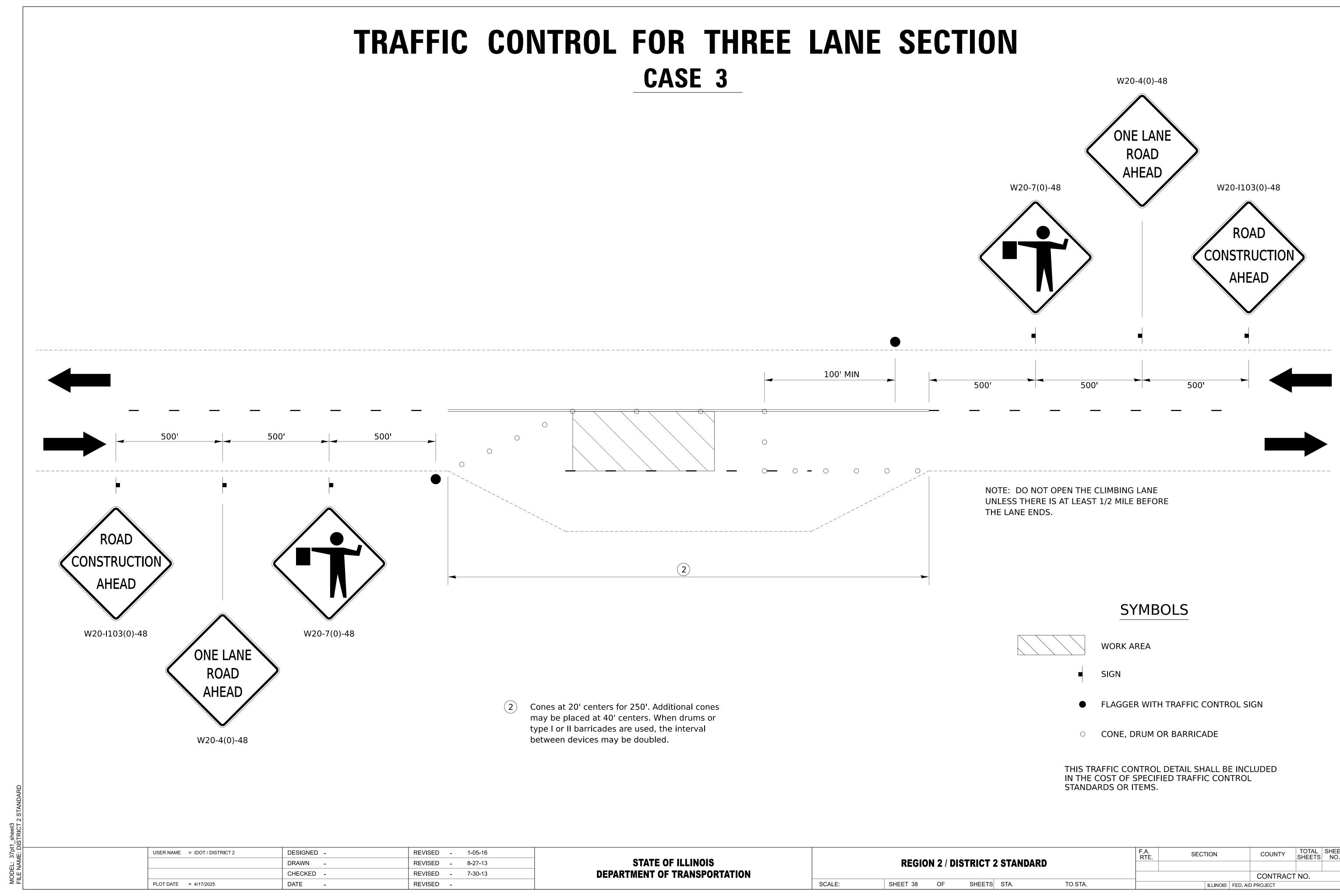
SHEETS STA.

SCALE:

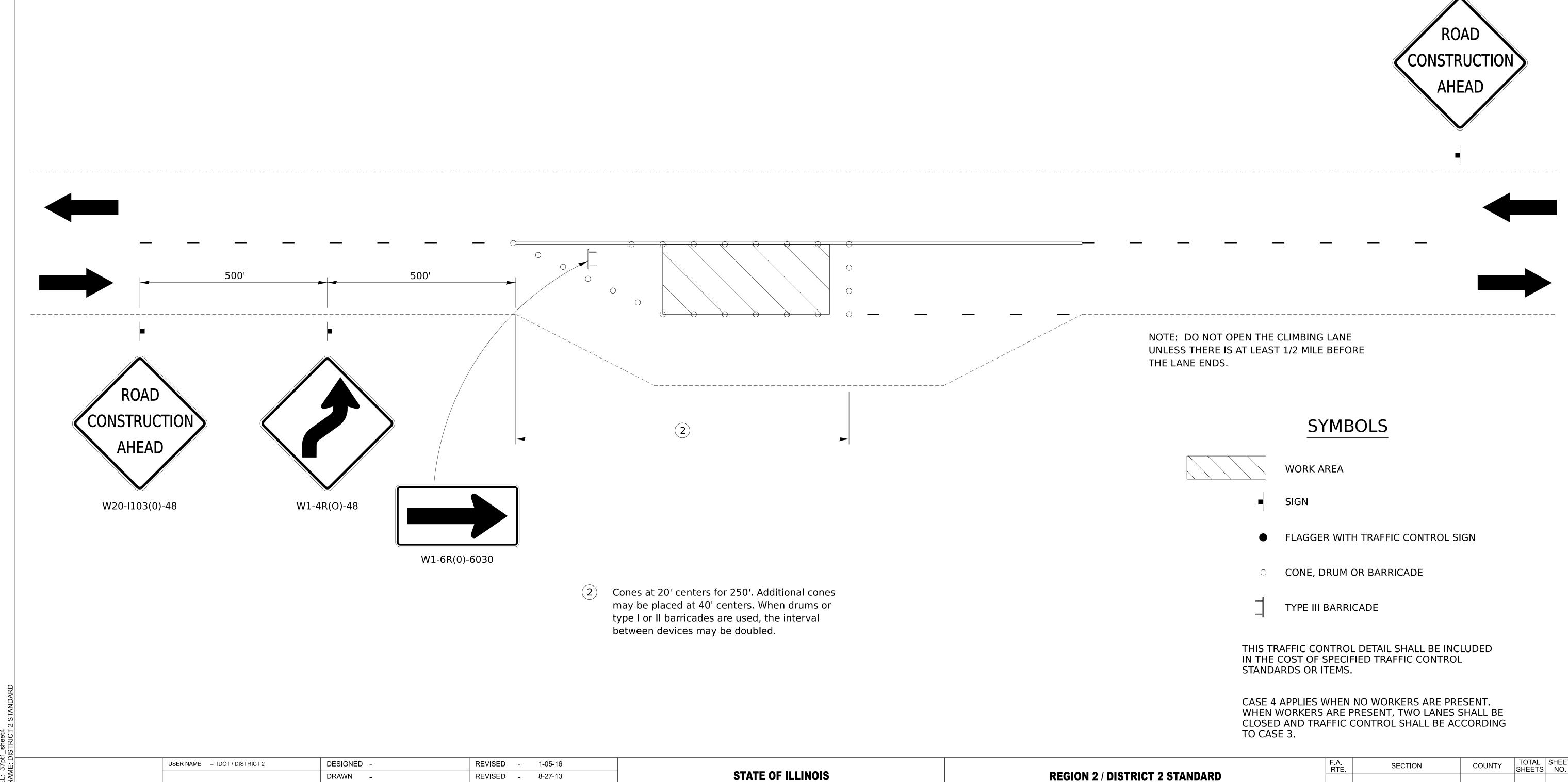
SHEET 37

ILLINOIS FED. AID PROJECT

CONTRACT NO.



TRAFFIC CONTROL FOR THREE LANE SECTION CASE 4



DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET 39

CHECKED -

DATE -

PLOT DATE = 4/17/2025

REVISED - 7-30-13

REVISED -

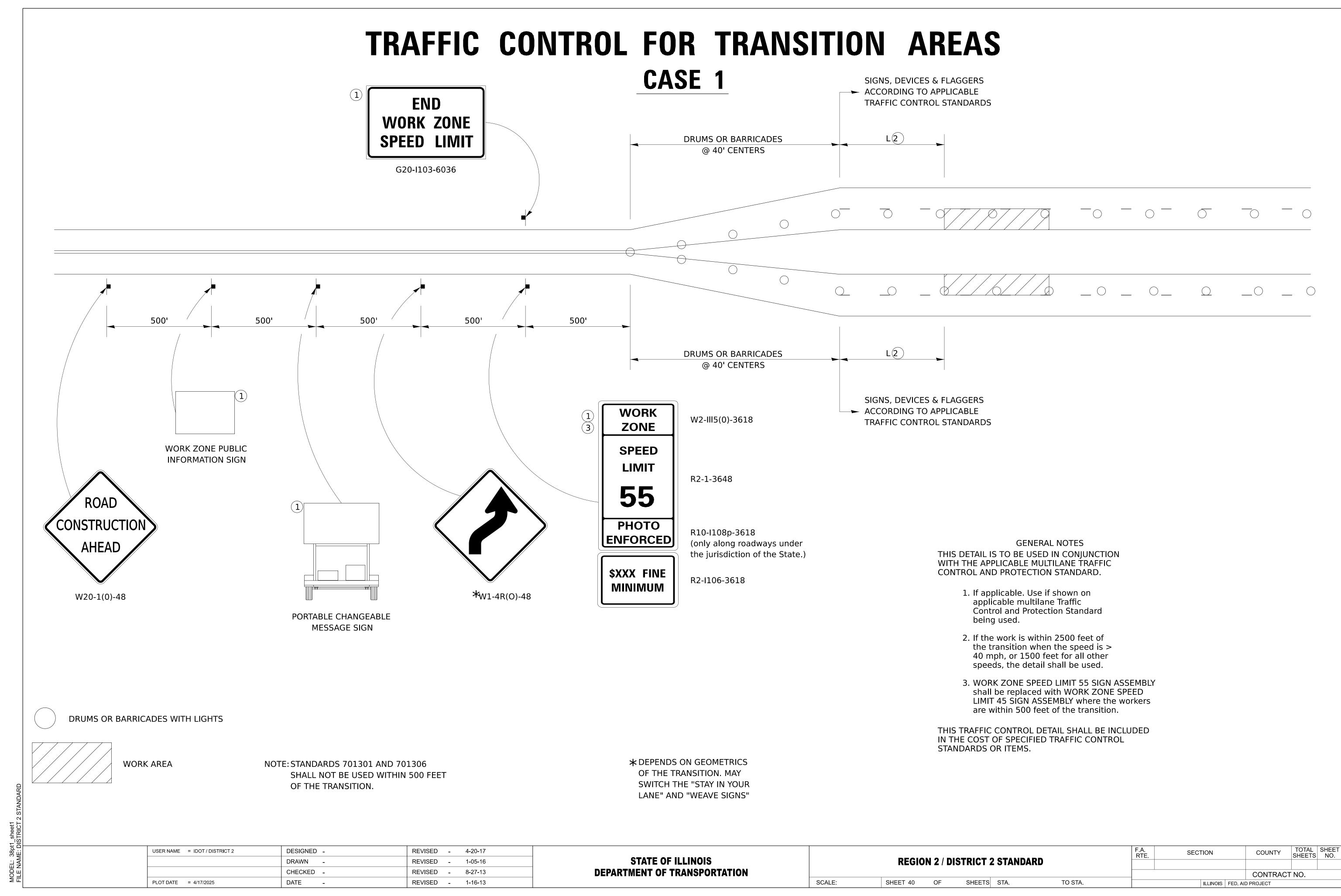
TO STA.

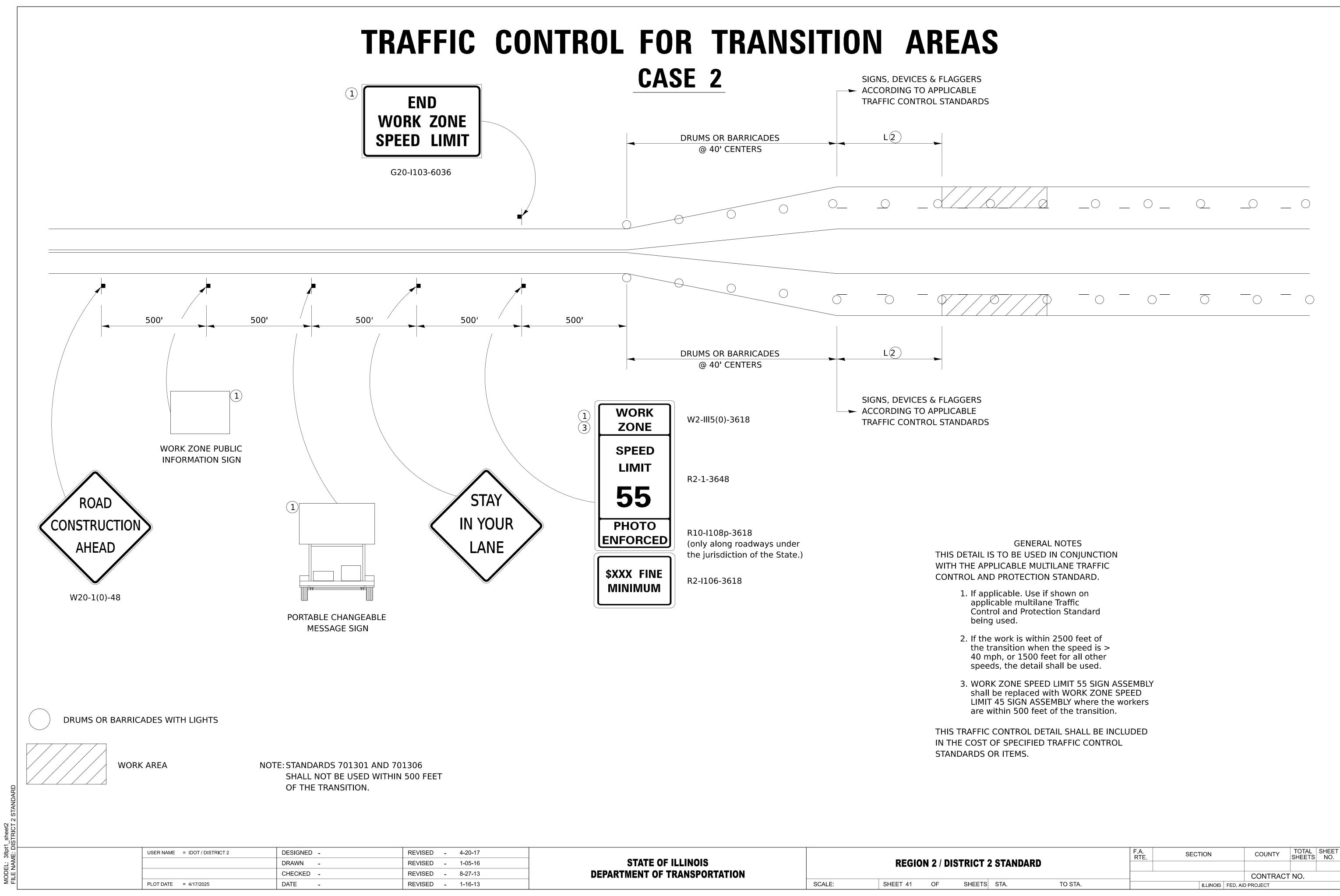
SHEETS STA.

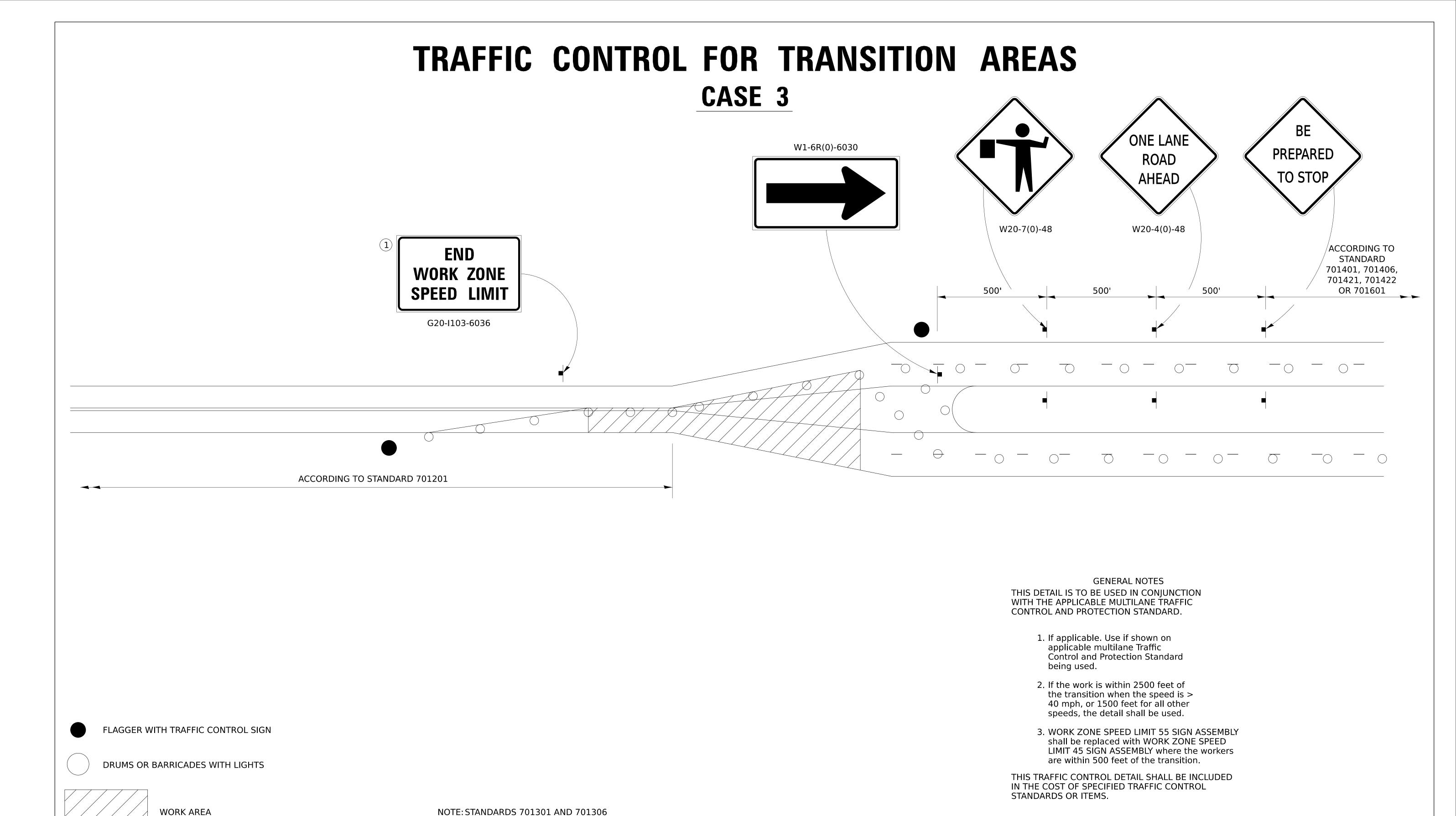
ILLINOIS FED. AID PROJECT

CONTRACT NO.

W20-I103(0)-48







USER NAME	= IDOT / DISTRICT 2	DESIGNED	-

PLOT DATE = 4/17/2025

DRAWN -

CHECKED -

DATE -

SHALL NOT BE USED WITHIN 500 FEET OF THE TRANSITION.

4-20-17

1-05-16

8-27-13

REVISED

REVISED -

REVISED -

REVISED - 3-05-12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

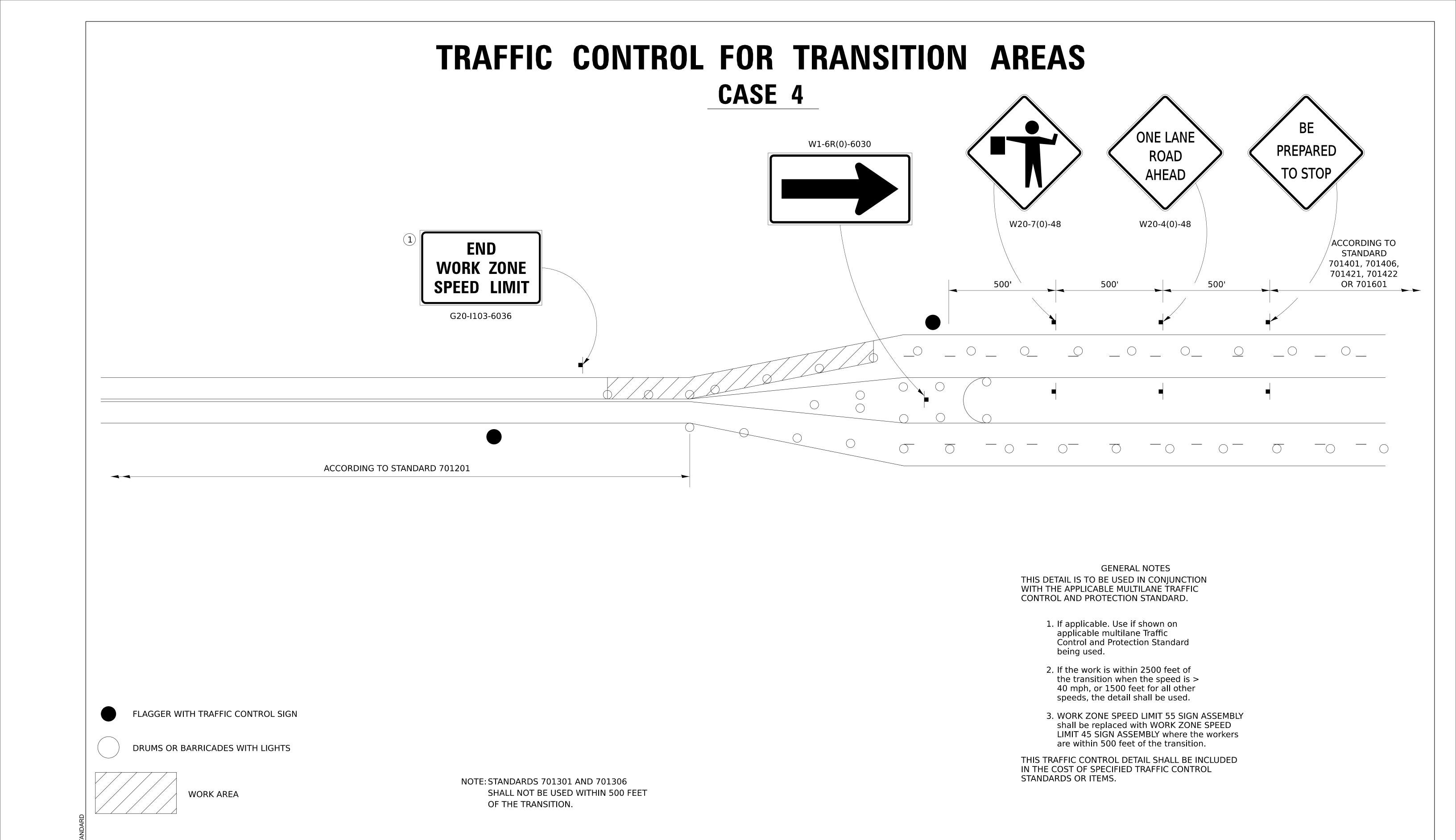
SCALE:

SHEET 42 OF SHEETS STA. TO STA.

SECTION COUNTY TOTAL SHEETS NO.

CONTRACT NO.

SCALE: SHEET 42 OF SHEETS STA. TO STA.



USER NAME = IDOT / DISTRICT 2 DESIGNED -REVISED - 4-20-17 STATE OF ILLINOIS REGION 2 / DISTRICT 2 STANDARD DRAWN -REVISED -1-05-16 **DEPARTMENT OF TRANSPORTATION** CHECKED -REVISED - 8-27-13 PLOT DATE = 4/17/2025 DATE -REVISED - 3-05-12 SCALE: SHEET 43

SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT TRAFFIC CONTROL FOR TRANSITION AREAS

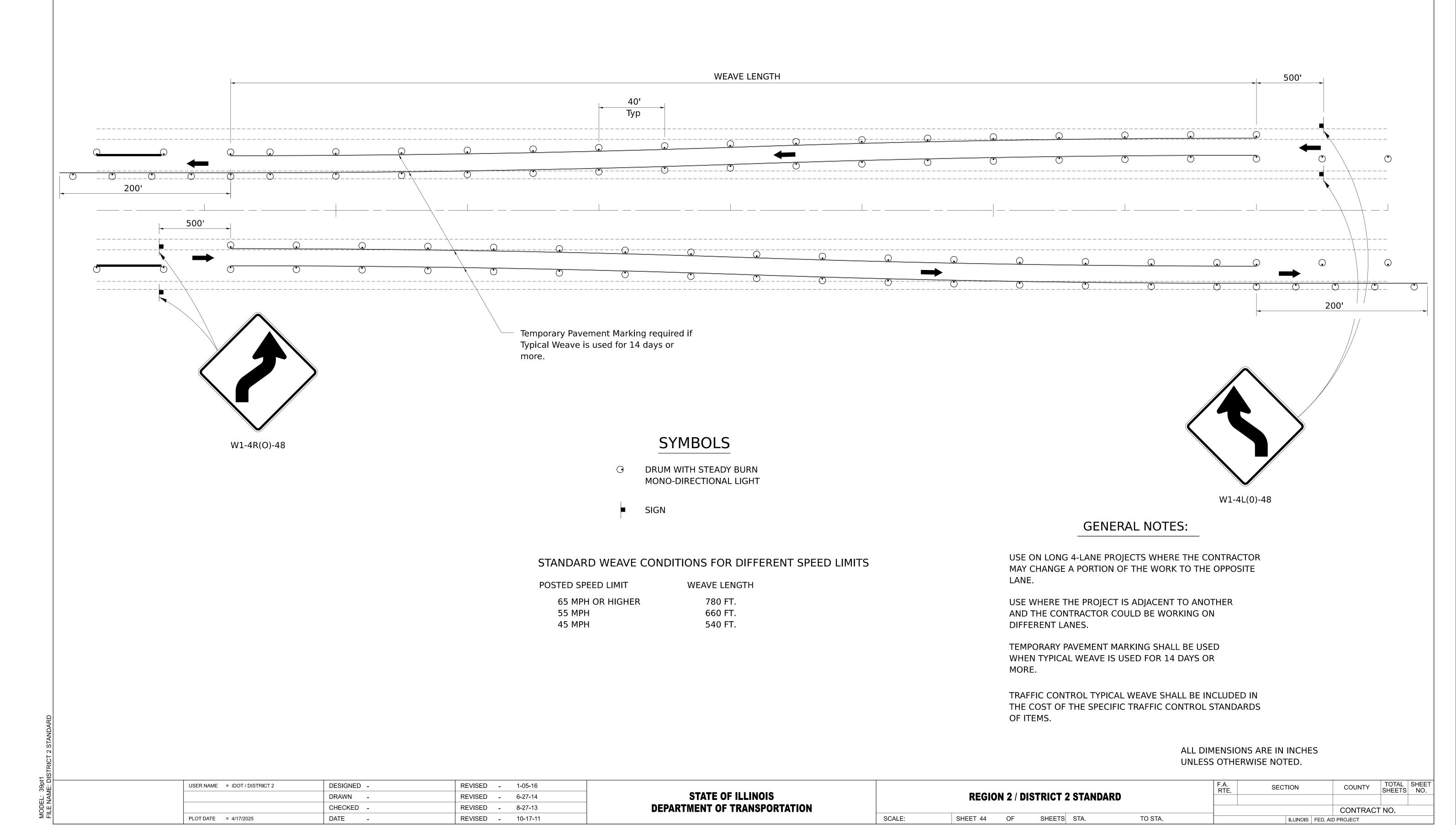
COUNTY

CONTRACT NO.

SECTION

TOTAL SHEET NO.

TRAFFIC CONTROL TYPICAL WEAVE

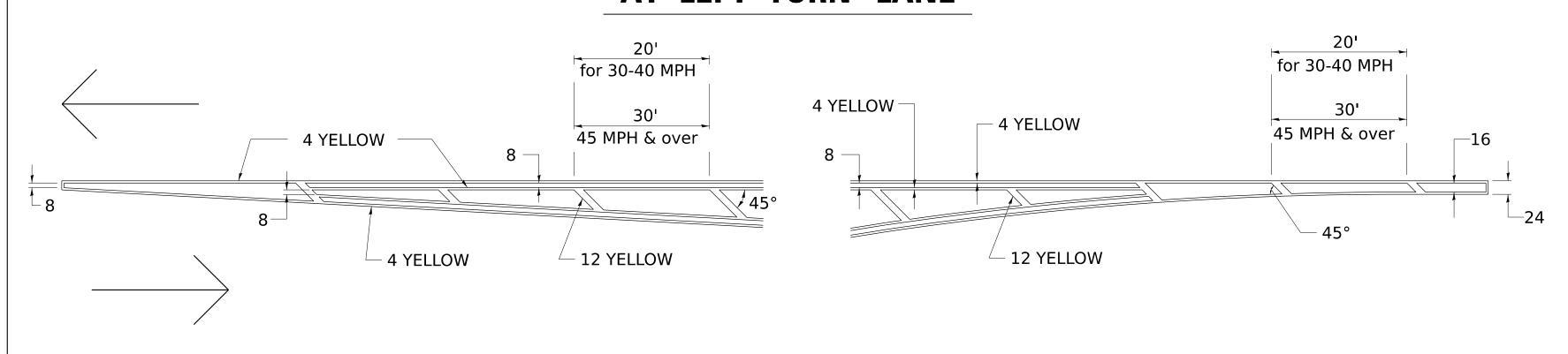


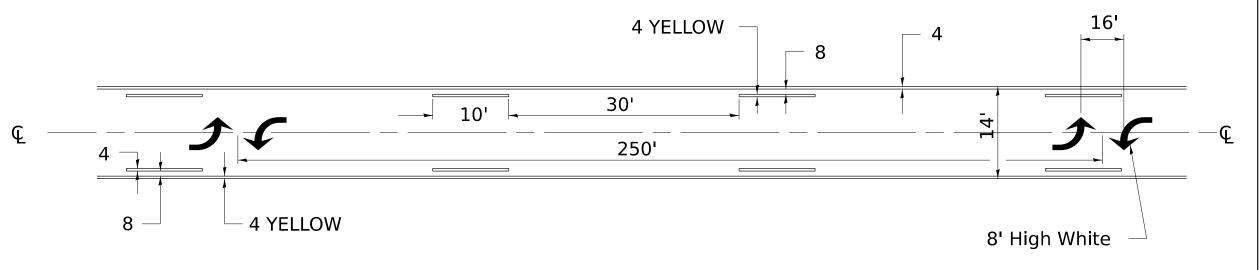
TRAFFIC CONTROL FOR ROAD CLOSURE CLOSED **CONDITION II** AHEAD Minor CLOSED Sideroad Closure **CLOSED CLOSED** W20-3(O)-48 AHEAD W20-3(O)-48 W21-I100(O)-48 W20-3(O)-48 **SYMBOLS** W20-3(O)-48 W20-3(O)-48 W21-I100(O)-48 **BARRICADE** Work area ROAD ROAD BARRICADE **CLOSED CLOSED** Type III Barricade with Flashers **CLOSED** W20-3(O)-48 W21-I100(O)-48 Sign with flashing light ROAD W1-7(O)-3618 **CLOSED** XX FT **CONDITION I GENERAL NOTES 1** SIGN SPACING TABLE Longitudinal dimensions may be adjusted to Major Sign Spacing Posted Speed fit field conditions. ROAD CLOSED TO THRU TRAFFIC 500' 45 MPH and above W20-3(O)-48 Sideroad Closure 250' BARRICADE SET UP Below 45 MPH Side roads requiring all three signs as shown in CONDITION I (Major Sideroad Closure), shall be listed in the special provision. Variable ** Where local access is to be maintained, **CLOSED** 2 barricades are to be set up as shown SIGN LEGEND in "Road Closed To Thru Traffic". AHEAD Posted Speed Limit Distance Type III Barricades and R11-2-4830 signs 1000' 45 MPH and above shall be as shown in "Road Closed To All Traffic" 500' Below 45 MPH detail on Highway Standard 701901. W20-3(O)-48 All dimensions are in inches unless otherwise shown. Type III Barricades and R11-4-4830 signs shall be as shown in "Road Closed To Thru Traffic" detail on Highway Standard 701901. If the distance "D" TYPICAL APPLICATION exceeds 2000' an additional set of FOR ROAD CLOSURE barricades and R11-4-4830 shall be placed at each end of the work area. DESIGNED -REVISED 8-03-17 USER NAME = IDOT / DISTRICT 2 **SECTION** COUNTY **REGION 2 / DISTRICT 2 STANDARD** STATE OF ILLINOIS DRAWN REVISED 1-05-16 **DEPARTMENT OF TRANSPORTATION** CHECKED -REVISED 8-27-13 CONTRACT NO. PLOT DATE = 4/17/2025 DATE REVISED -10-17-11 SCALE: SHEET 45 SHEETS STA. TO STA. ILLINOIS FED. AID PROJECT

TYPICAL PAVEMENT MARKINGS

MEDIAN PAVEMENT MARKING

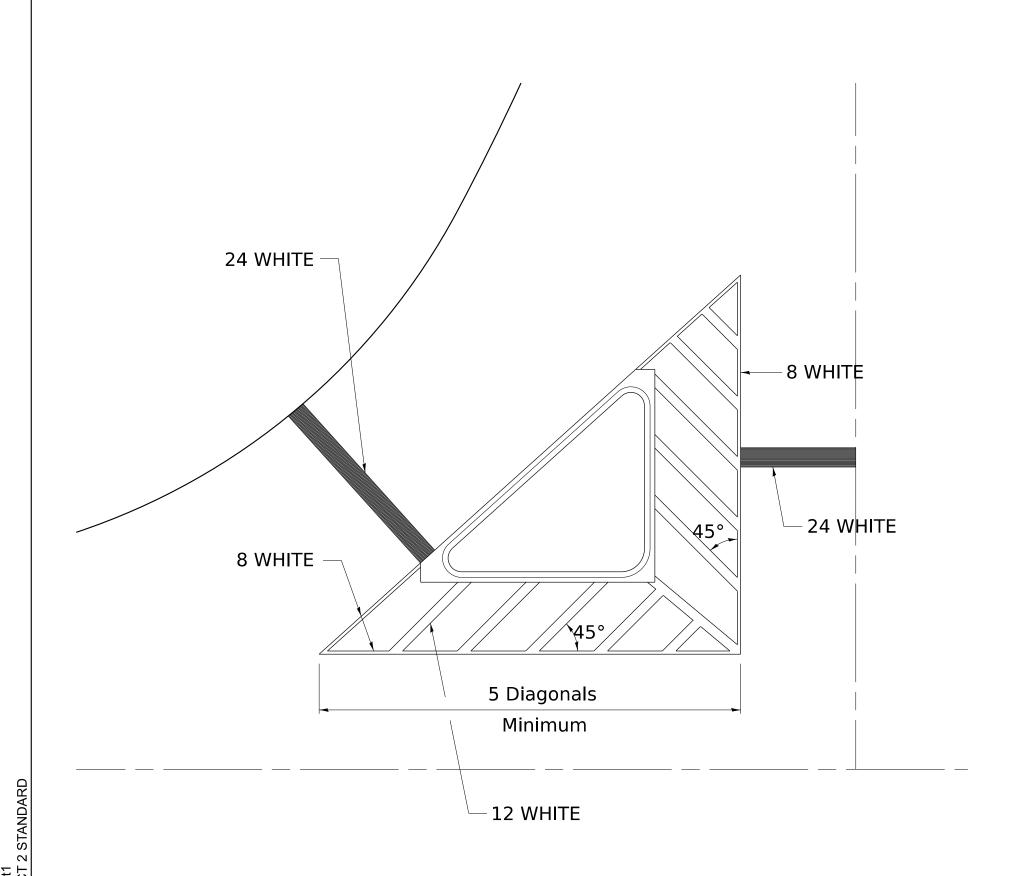
TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE



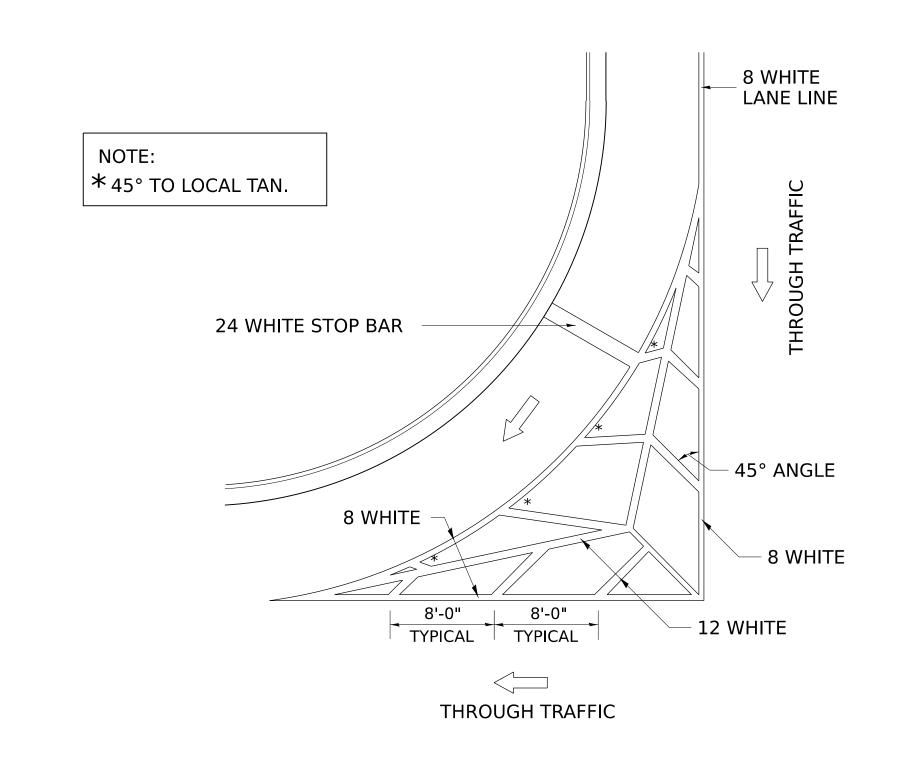


** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

TYPICAL ISLAND OFFSET SHOULDER WIDTH

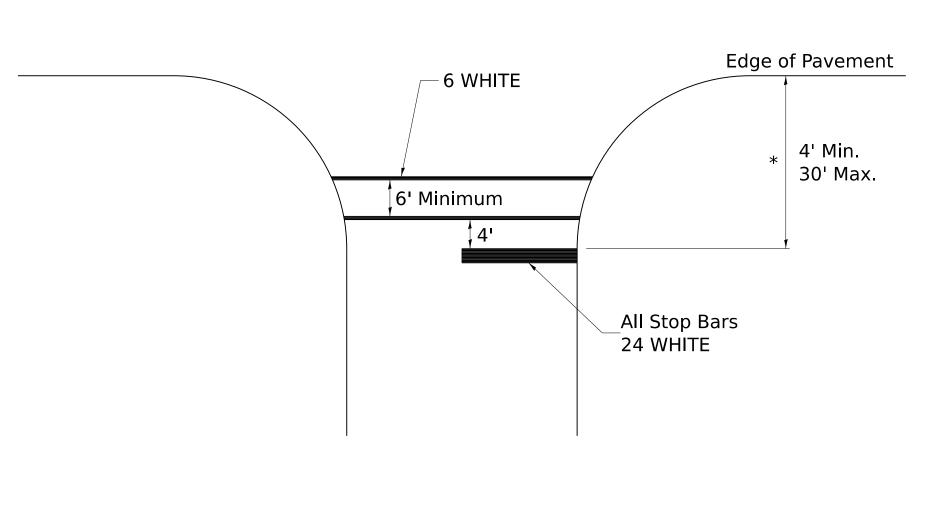


TYPICAL MARKING FOR PAINTED ISLANDS



STANDARD CROSSWALK MARKING

See Schedules for Locations



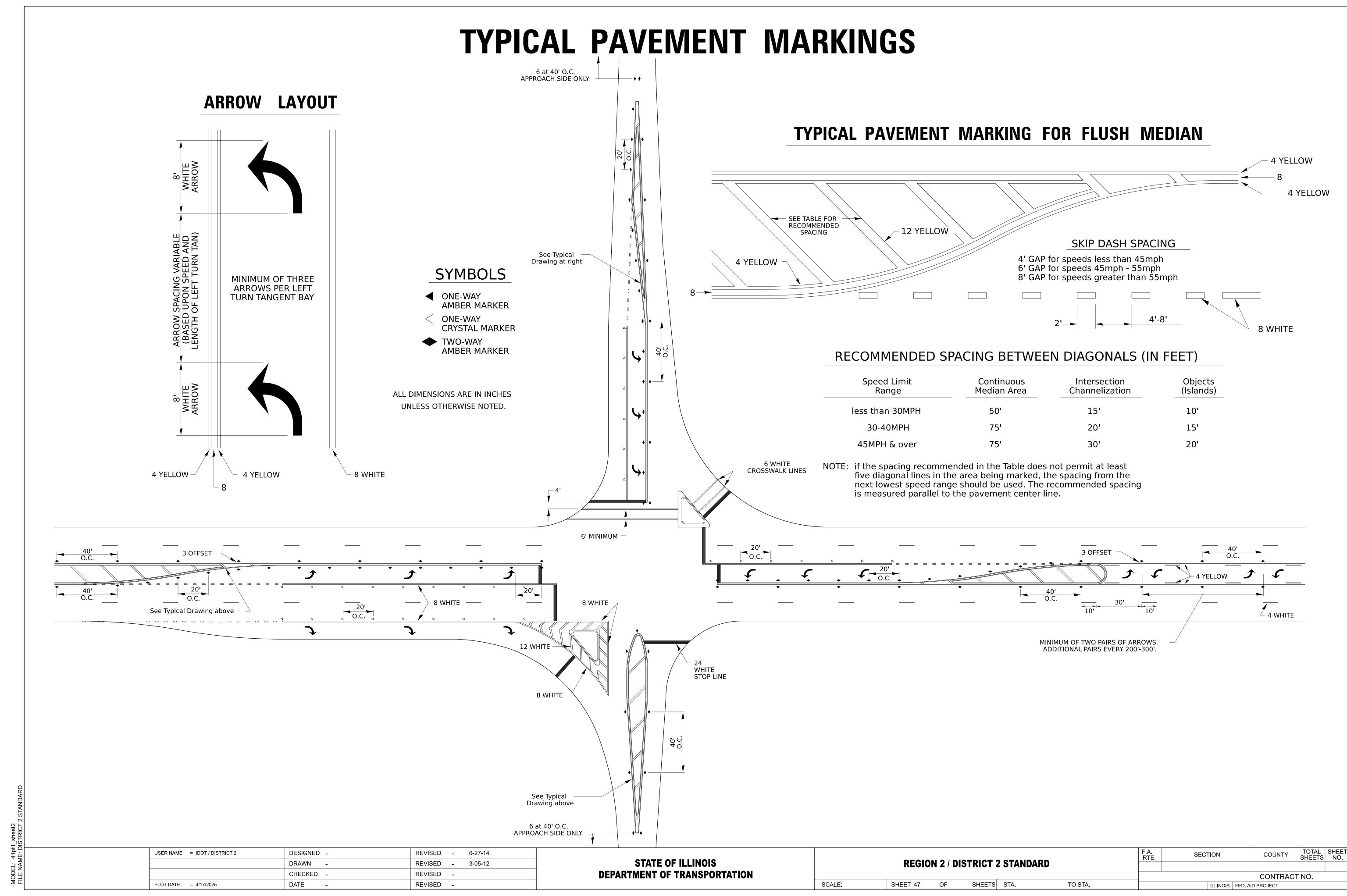
* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 3-05-12
	CHECKED -	REVISED -
PLOT DATE = 4/17/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

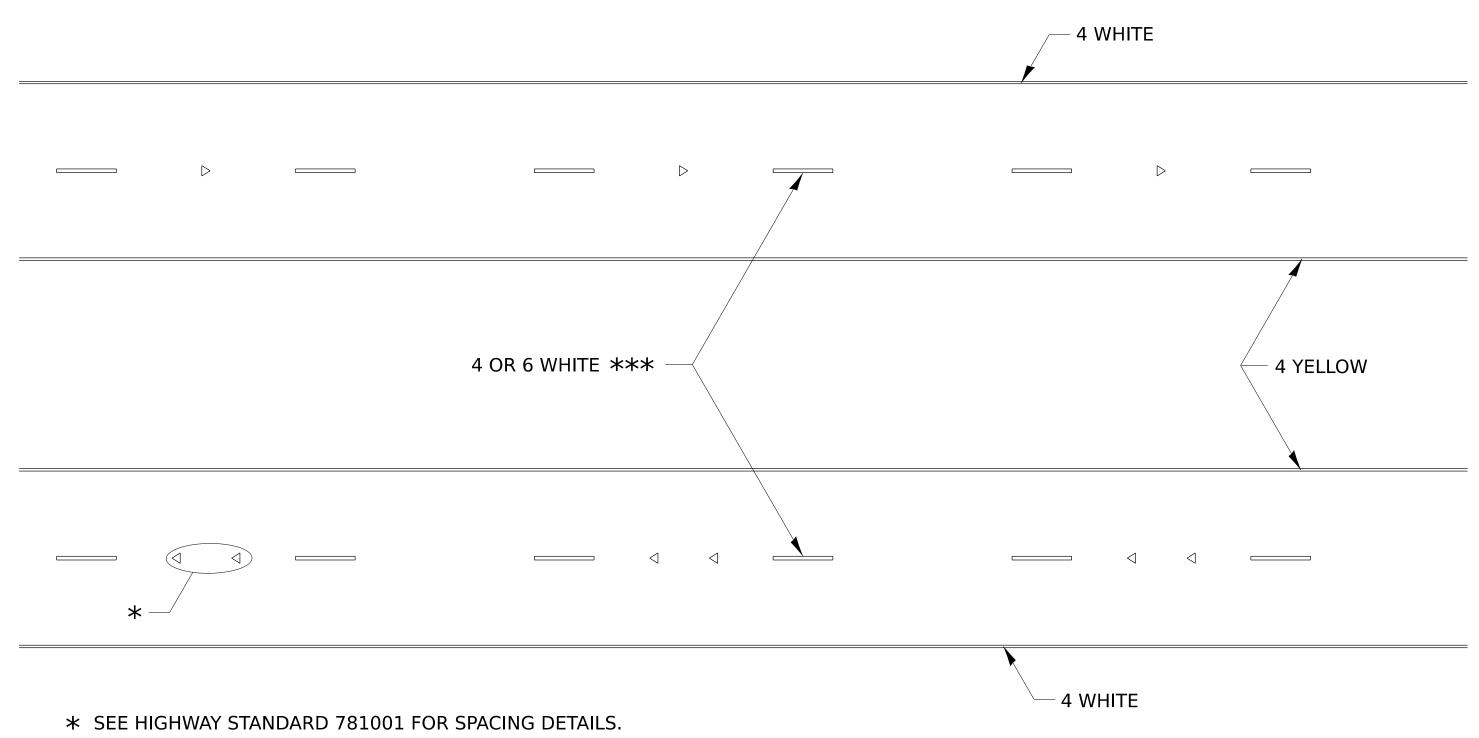
REGION 2 / DISTRICT 2 STANDARD							
	REGIO	N 2 / DI	SIRICIZ	SIANDA	AKD		
	SHEET 46	OF	SHEETS	STA.	TO STA.		



TYPICAL PAVEMENT MARKINGS

TYPICAL PARKING SPACING

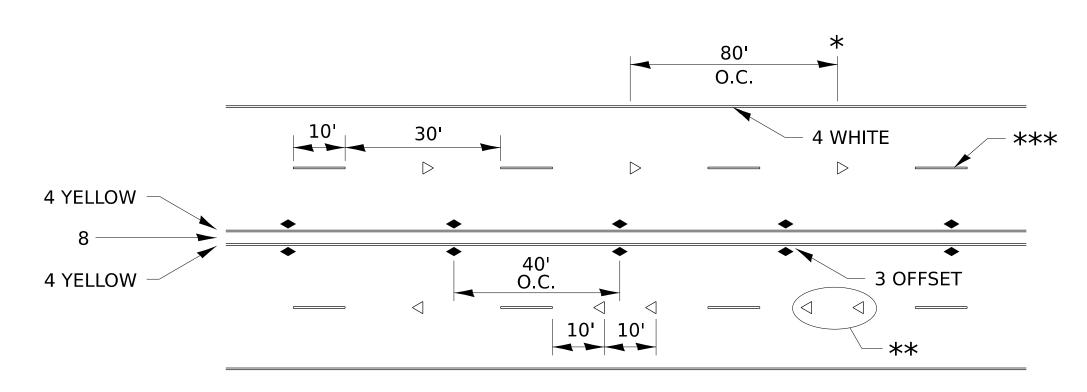
22'-25'



USE DOUBLE MARKERS WHEN ADT \geq 20,000.

4 WHITE 8' - Face of Curb 20' Min. No Parking Zone 22'-25' - Face of Curb Approach to Signal Face of Curb No Parking Zone

MULTI-LANE / DIVIDED



- * REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.
- ** USE DOUBLE MARKERS WHEN ADT ≥ 20,000
- *** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

MULTI-LANE / UNDIVIDED & ONE WAY

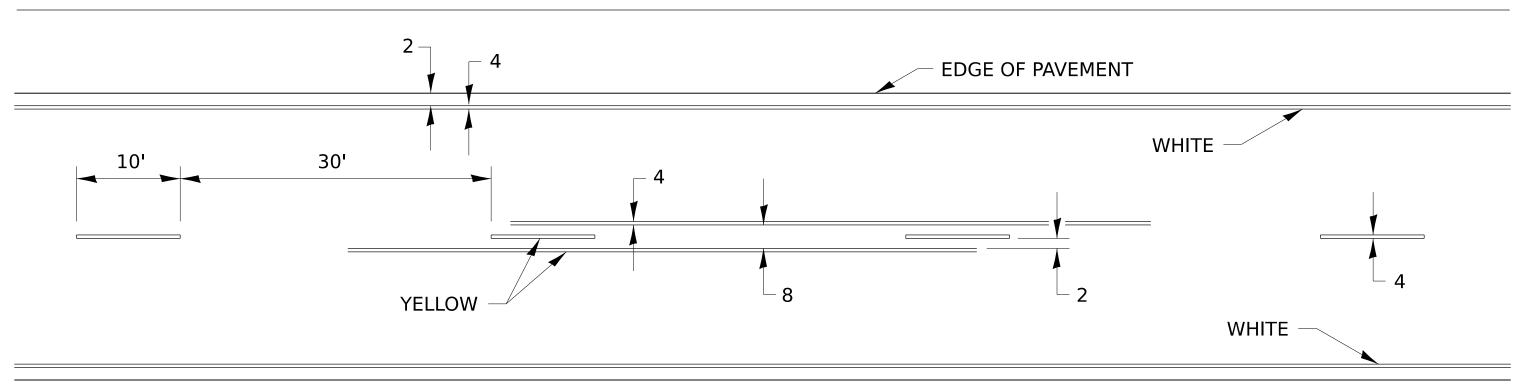
(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED -	6-27-14
	DRAWN -	REVISED -	8-27-13
	CHECKED -	REVISED -	11-28-12
PLOT DATE = 4/17/2025	DATE -	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

		D=014	NI 0 / D				F.A. RTE.	SECTION	COUNTY	TOTAL
		REGIC)N 2 / D							
									CONTRAC	T NO.
-	SCALE:	SHEET 48	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT	

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



TOTAL SHEET NO.

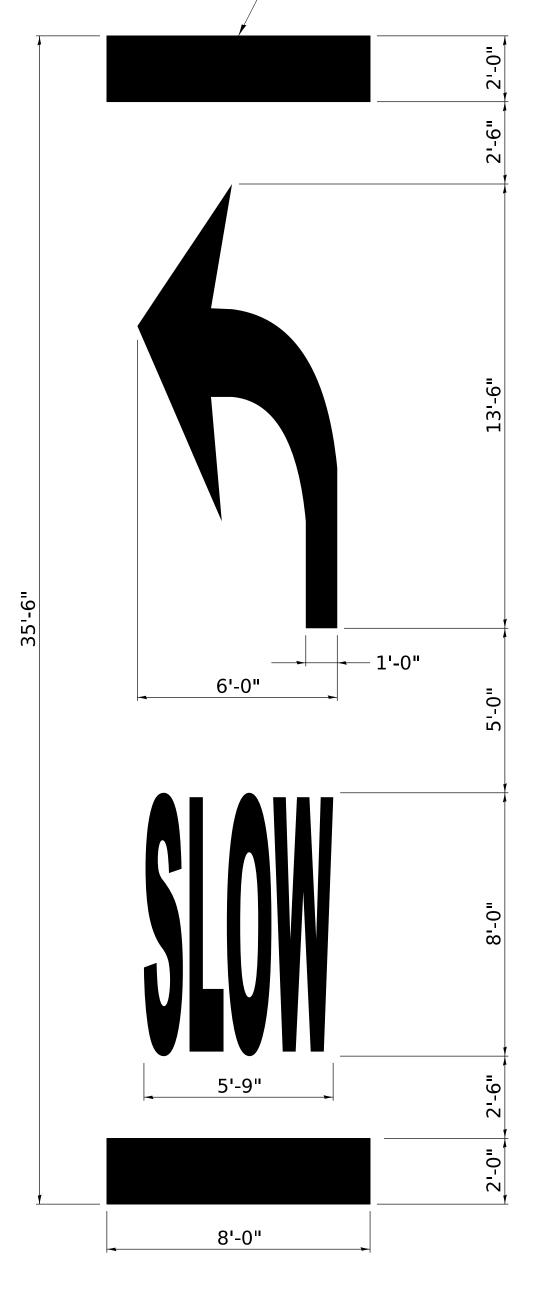
TYPICAL PAVEMENT MARKINGS ** 6" WHITE ON INTERSTATES, WHERE THE SPPED LIMIT IS 65 MPH, OR WHEN DIRECTED BY THE ENGINEER. **EXIT RAMP** 4" WIDE AT ALL OTHER LOCATIONS. EOP 4 YELLOW NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS 10' 12 WHITE - EOP 8 WHITE 30' CENTERS 10' SHOULDER 4 WHITE 4' SHOULDER 8' SHOULDER 4 YELLOW ENTRANCE RAMP 4 YELLOW 8 WHITE 4 WHITE 4 10' SHOULDER - 8 WHITE __ 4 WHITE 8' SHOULDER 4 YELLOW ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED. 4 YELLOW 4 YELLOW **CLOVERLEAF** 10' SHOULDER 10' SHOULDER 4 WHITE - 8 WHITE 10' SHOULDER 8 WHITE 8 WHITE 4 WHITE 4 WHITE EOP-4 YELLOW 200' (TYP.) (TAPER LENGTH AS DIRECTED BY THE ENGINEER) TOTAL SHEET SHEETS NO. DESIGNED -REVISED 9-15-23 USER NAME = IDOT / DISTRICT 2 STATE OF ILLINOIS REGION 2 / DISTRICT 2 STANDARD DRAWN 8-27-13 **DEPARTMENT OF TRANSPORTATION** CHECKED -REVISED -CONTRACT NO. TO STA. PLOT DATE = 4/17/2025 REVISED -SCALE: SHEET 49 ILLINOIS FED. AID PROJECT

8'-0"

CURVE ARROW HIGH-SPEED STANDARD MARKING

TYPICAL PAVEMENT MARKINGS

EDGE OF 24" PAVEMENT MARKING SHOULD CORRESPOND TO REFERENCE POINT SET IN FIELD.



SLOW CURVE ARROW

LOW-SPEED STANDARD MARKING

(POSTED SPEED LIMIT 35 MPH OR LESS)

TABLE 1A

			V	/ARNIN	G SPEE	D		
POSTED SPEED	20	25	30	35	40	45	50	55
			V	ALUE O	F X (FT)		
20 *	100							
25 *	100	100						
30 *	100	100	100					
35 *	100	100	100	100				
40 *	100	100	100	100	100			
45 *	125	110	100	100	100	100		
50 *	225	200	175	135	100	100	100	
55 *	300	275	250	200	175	135	100	100

* NOTE: ON ROADWAYS WITH A POSTED SPEED LIMIT OF 35 MPH OR LESS, USE THE 35'-6" PAVEMENT MARKING LEGEND AS SHOWN IN THE SLOW CURVE ARROW, LOW-SPEED STANDARD MARKING. ON ALL OTHER ROADWAYS, USE THE 50'-0" PAVEMENT MARKING LEGEND AS SHOWN ON THE SLOW CURVE ARROW, HIGH-SPEED STANDARD MARKING.

SCALE:

**L IS TAKEN FROM TABLE 1A

TYPICAL LAYOUT AND PLACEMENT OF SUPPLEMENTAL CURVE PLACEMENT MARKING

FRONT EDGE OF LINE OF PAVEMENT

LEGEND SHALL NOT BE PLACED

UPSTREAM OF SIGN W1-2.

(POSTED SPEED LIMIT 40 MPH OR GREATER)

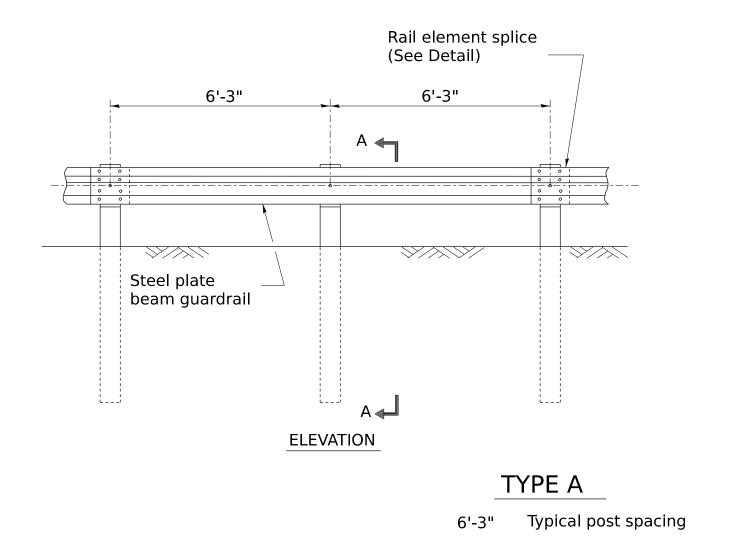
DESIGNED -REVISED 4-17-25 USER NAME = IDOT / DISTRICT 2 DRAWN REVISED CHECKED -REVISED PLOT DATE = 4/17/2025 DATE -REVISED -

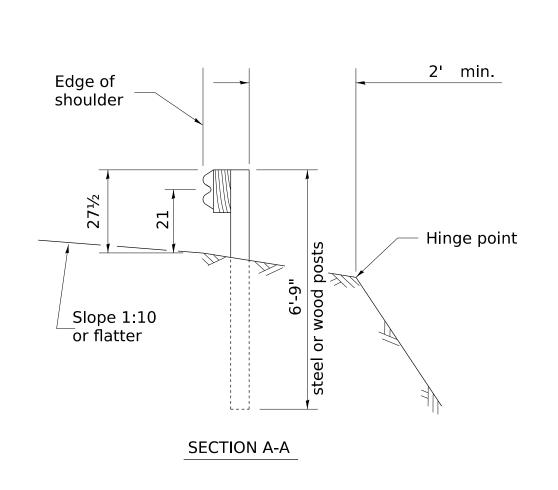
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

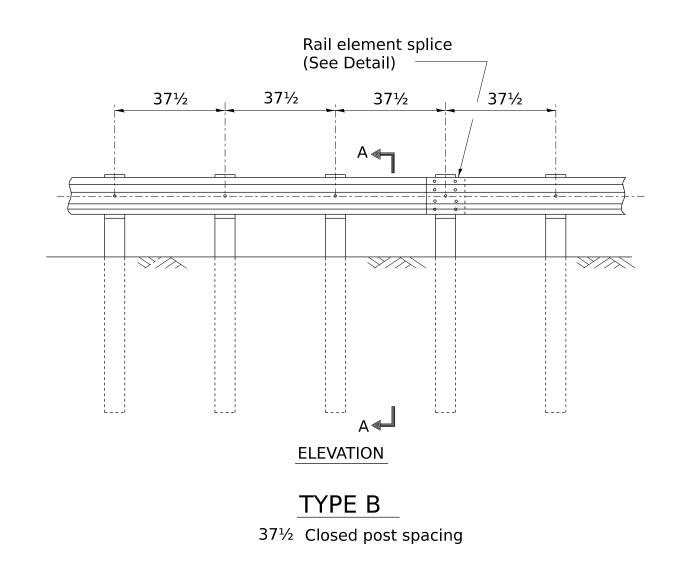
REGION 2 / DISTRICT 2 STANDARD SHEETS STA. TO STA. SHEET 50

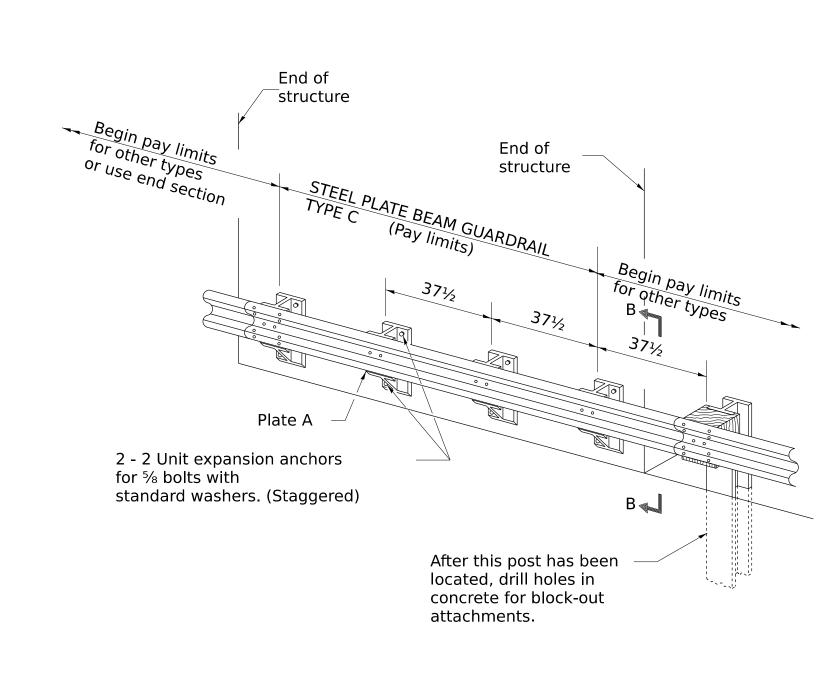
CONTRACT NO. ILLINOIS FED. AID PROJECT

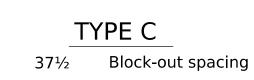
W1-2

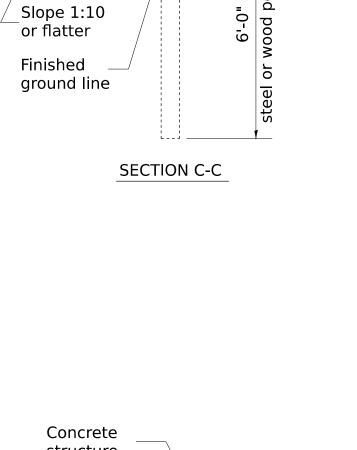


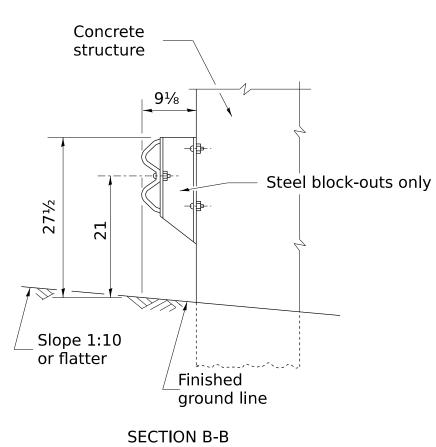


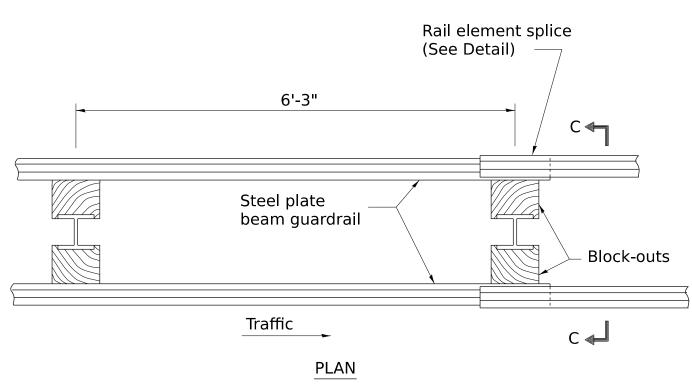












TYPE D

Double steel plate beam guardrail
6'-3" typical post spacing

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.

The existing steel posts may be drilled to match the bolt pattern shown herein for the wood block-out, or a new steel post shall be provided.

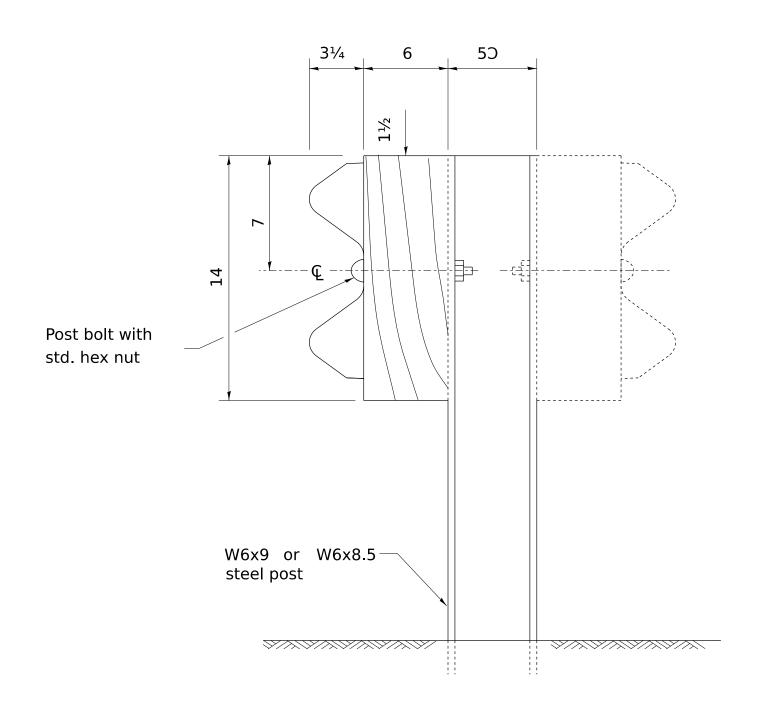
This detail is applicable to the guardrail system used prior to January 1, 2007. For details on the Midwest Guardrail System, see Standard 630001.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED	
	DRAWN -	REVISED - 10-18-11	
	CHECKED -	REVISED -	
PLOT DATE = 4/17/2025	DATE -	REVISED -	

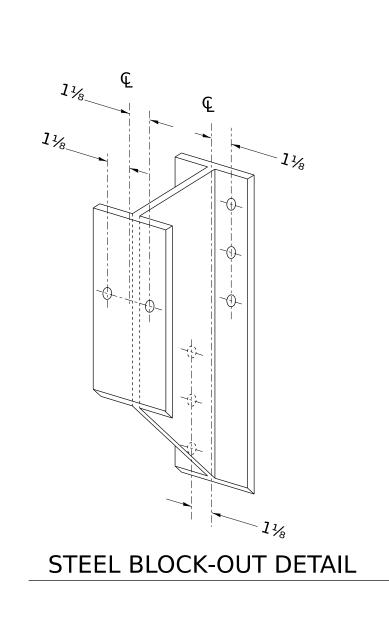
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

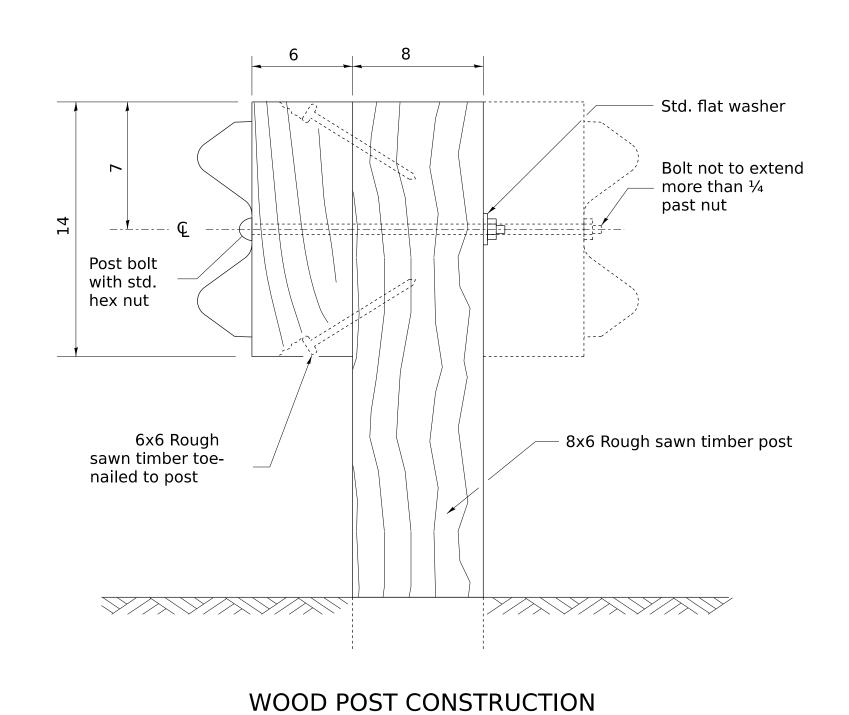
	DEGL	NI 0 / D	IOTRIAT (4.00	F.A. RTE.	SECTI	ION		COUNTY	TOTAL SHEETS
	REGIC)N 2 / D	ISTRICT 2	2 STAND	AKD						
	T									CONTRAC	T NO.
SCALE:	SHEET 50	OF	SHEETS	STA.	TO STA.		1	ILLINOIS	FED. AID	PROJECT	

TOTAL SHEET SHEETS NO.



STEEL POST CONSTRUCTION





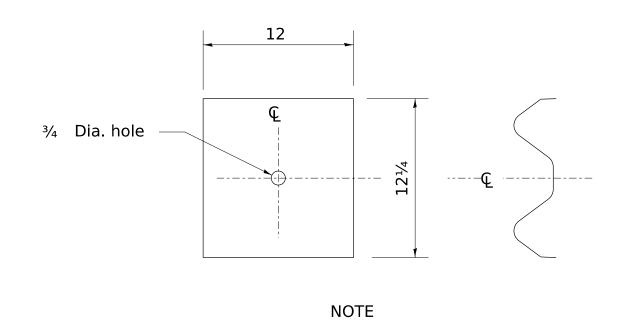
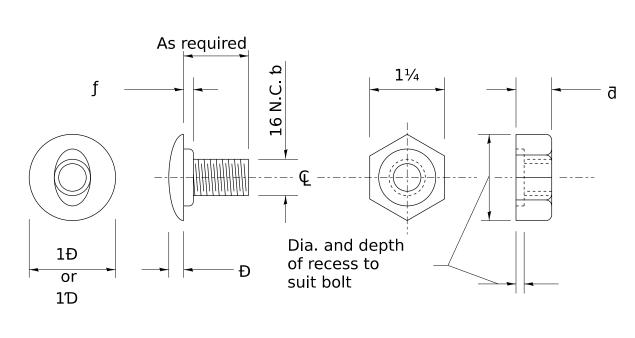


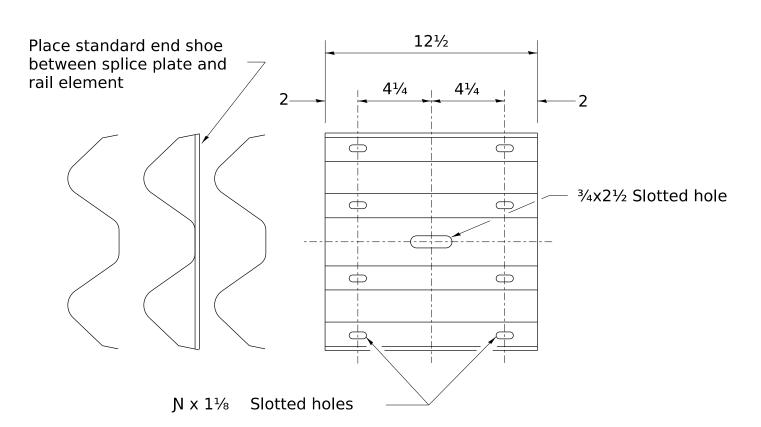
Plate A shall be placed between rail element and block-out at non-splice mounting points only when steel block-outs are used.

PLATE A

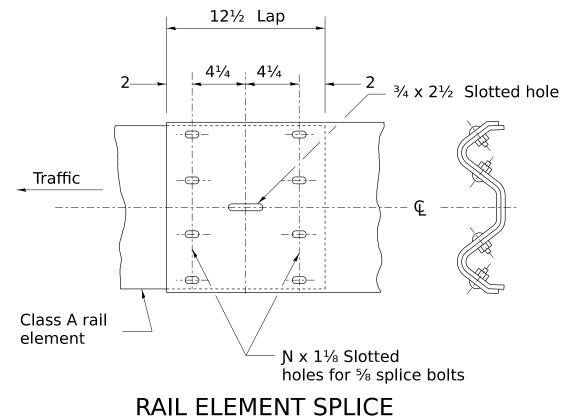


POST OR SPLICE BOLT & NUT

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-05-16				F	A. SE	CTION COL	JNTY TOTAL SHEE
	DRAWN -	REVISED - 10-18-11	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	<u>'</u>	(12.		0112210 110.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					CON	TRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 51 OF SHEETS STA. TO STA.			ILLINOIS FED. AID PROJEC	T

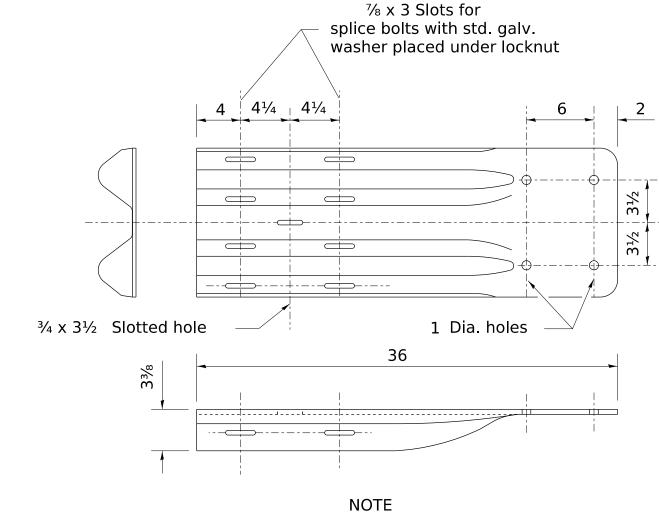


SPLICE PLATE



Neutral axis ½ Steel plate Rail element 1Đ Dia. hole 0 Post bolt with washer on front face (8 required) \bigcirc \bigcirc ^{– ¾} Dia. hole NOTE Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

ANCHOR PLATE T DETAILS

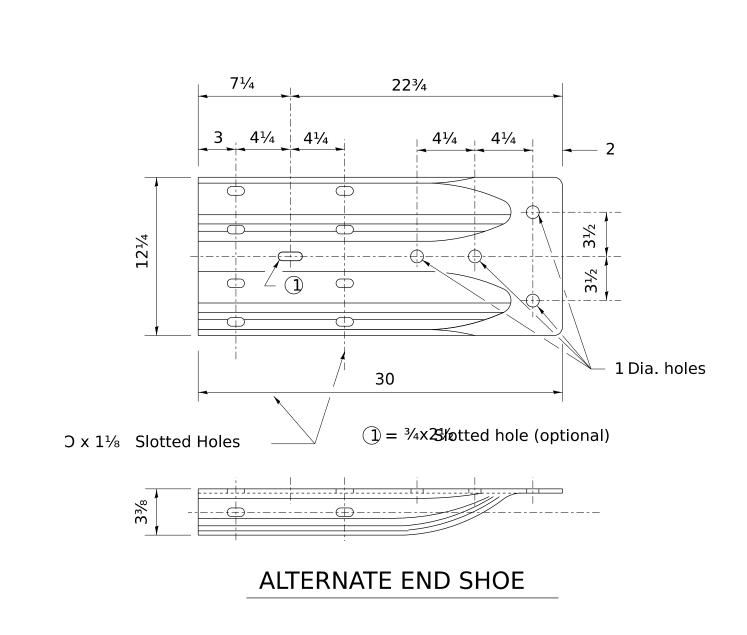


When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

END SHOE



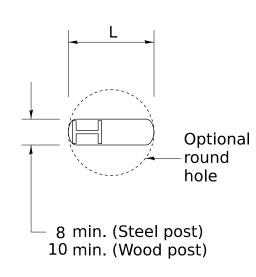
TOTAL SHEET SHEETS NO.

27½± 8½ 01
Class A rail element
61/4
END SECTION

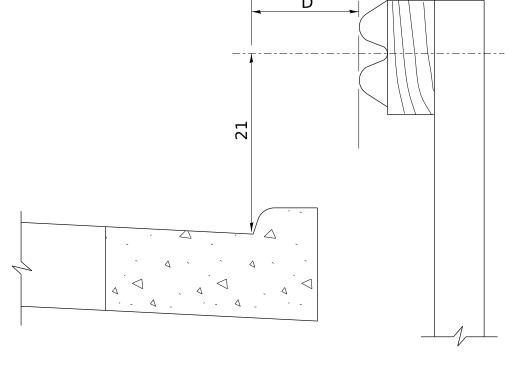
DRAWN - REVISED - 10-18-11 CHECKED - REVISED -	USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-05-16	
CHECKED - REVISED -		DRAWN -	REVISED - 10-18-11	
		CHECKED -	REVISED -	
PLOT DATE = 4/17/2025 DATE - REVISED -	PLOT DATE = 4/17/2025	DATE -	REVISED -	

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

		55010					F.A. RTE.	SECTION	COUNTY	TOTAL
	REGION 2 / DISTRICT 2 STANDARD									
ŀ		I					_		CONTRAC	T NO.
l	SCALE:	SHEET 52	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AII	D PROJECT	



PLAN



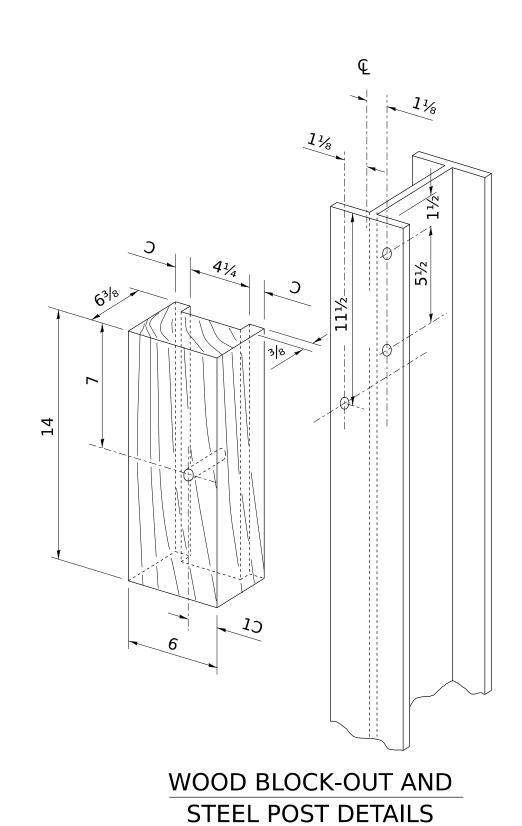
Note:

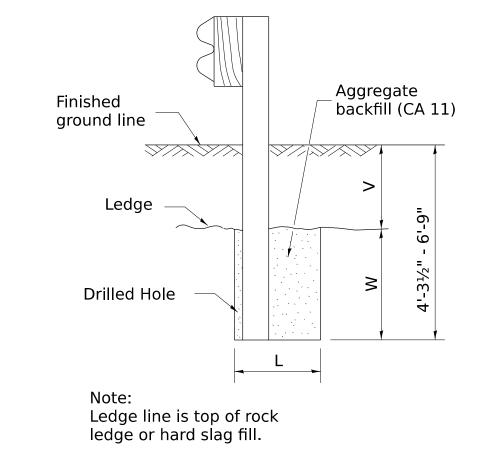
If it is necessary for D to be more than and loveless than 10'-toy'pe durb and gutter (Std. 606001) shall be used in front of and in advance

of the guardrail.

GUARDRAIL PLACED BEHIND CURB

(D = O desirable to 12 aximum)



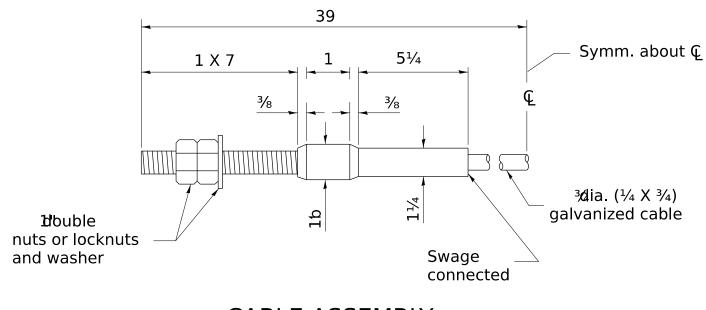


ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS

MATERIAL IS ENCOUNTERED

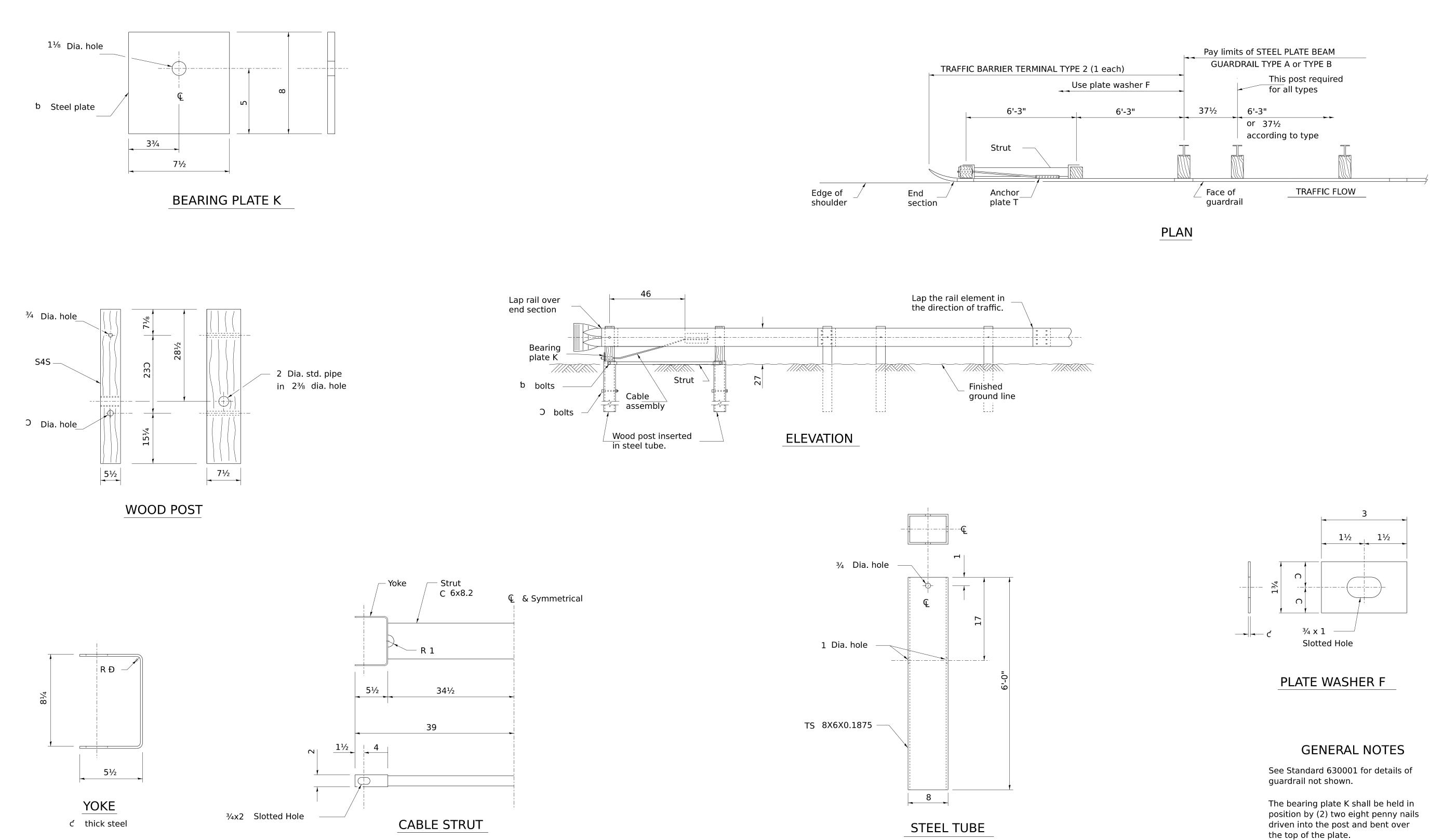
V	W	L			
V	, VV	Steel Post	Wood Post		
0 - 18	24	21	23		
>18 - 41.5	12	8	10		
>41.5 - 53.5	12 - 0	8	10		



CABLE ASSEMBLY
(40,000 lbs. min. breaking strength)
Tighten to taut tension.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-05-16				F.A. RTE	SECTION	COUNTY TOTAL SHEET SHEETS NO.	
	DRAWN -	REVISED - 10-18-11	STATE OF ILLINOIS REGION 2 / DISTRICT 2 STANDARD					52.	
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 53 OF SHEETS STA. TO ST	STA.		ILLINOIS FE	D. AID PROJECT

TRAFFIC BARRIER TERMINAL, TYPE 2 (27" HEIGHT)



SCALE:

All dimensions are in inches unless otherwise shown.

REFLECTORS (SPECIAL)

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DELINEATOR REPLACEMENT

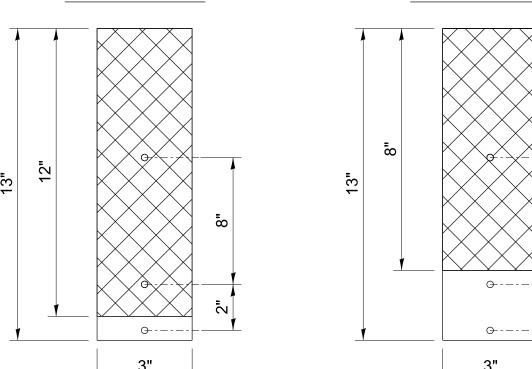
REPLACING

2 BUTTON

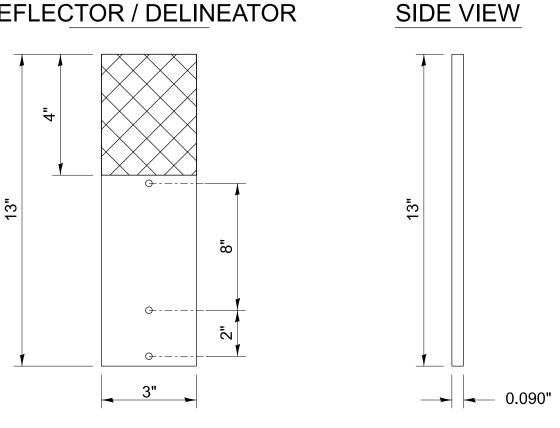
DELINEATOR

REFLECTORS FOR GUARDRAIL **BLOCK OUT OR DELINEATOR POST**

REPLACING 3 BUTTON **DELINEATOR**



STRAIGHT REFLECTOR / DELINEATOR



NOTE:

REFLECTOR REPLACEMENT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH INCLUDES ALL MOUNTING HARDWARE OUTLINED IN SECTION 635 OF THE SPEC BOOK.

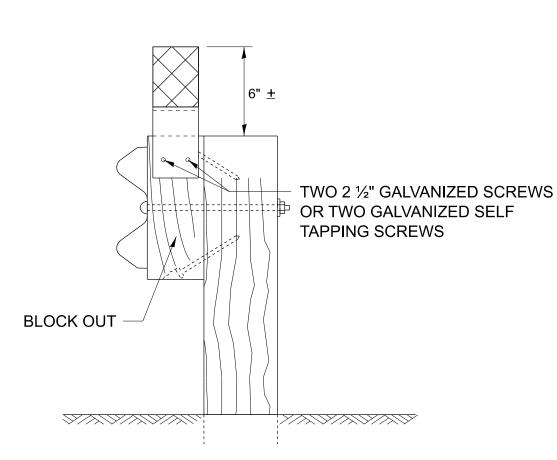
DELINEATOR INSTALLATION (REFLECTOR AND POST) SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR DELINEATORS (SPECIAL), WHICH INCLUDES ALL MOUTNING HARDWARE OUTLINED IN SECTION 635 OF THE SPEC BOOK.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON CENTER BARRIER OR IN THE MEDIAN SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE YELLOW.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS ON THE OUTSIDE OF THE ROADWAY SHALL BE DOUBLE SIDED CRYSTAL

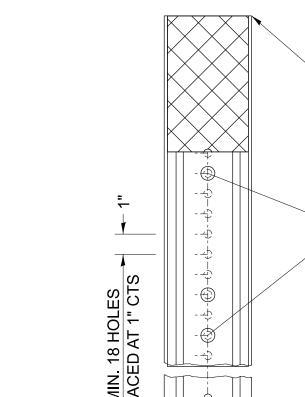
SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.



MOUNTED ON A GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO BLOCK OUTS.

REFLECTORS MOUNTED ON WOODEN OR PLASTIC OR METAL BLOCK OUT SHALL BE MOUNTED USING TWO 2 1/2" GALVANIZED SCREWS WITH WASHERS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.



ADDITIONAL SHEETING MAY BE ADDED AS NEEDED

FOR TURN AROUNDS AS SHOWN IN THE PLANS

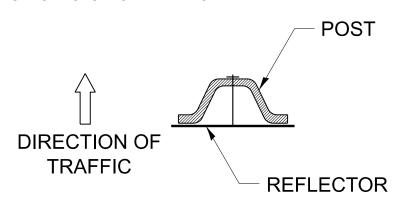
MOUNTED ON A DELINEATOR POST

10/24 X 1 1/2" BOLTS WITH WASHERS AND NUT (ADDITIONAL HOLES MAY BE DRILLED AS NEEDED)

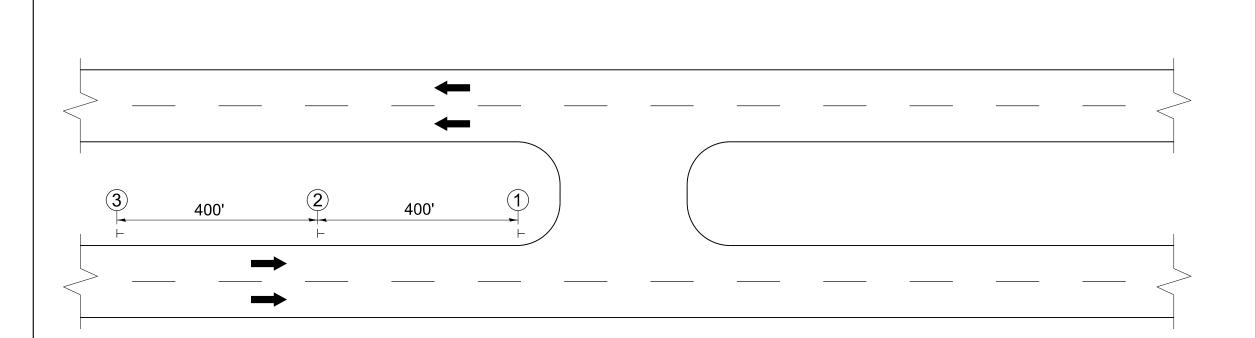
TOP OF REFLECTOR PLACED FLUSH WITH TOP OF POST UNLESS DOUBLE SIDED REFLECTOR IS CALLED FOR, THEN REFLECTOR SHALL BE PLACED SUCH THAT THE REFLECTOR IS ABOVE THE

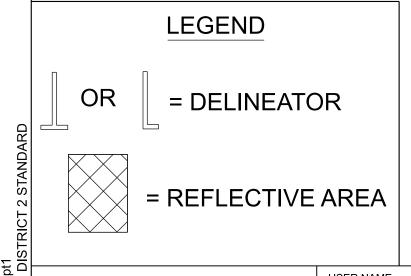
TOP OF THE POST AND VISIBLE

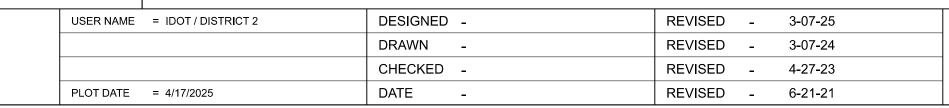
ADDITIONAL HOLES SHALL BE DRILLED IN THE REFLECTORS AS SHOWN ABOVE.

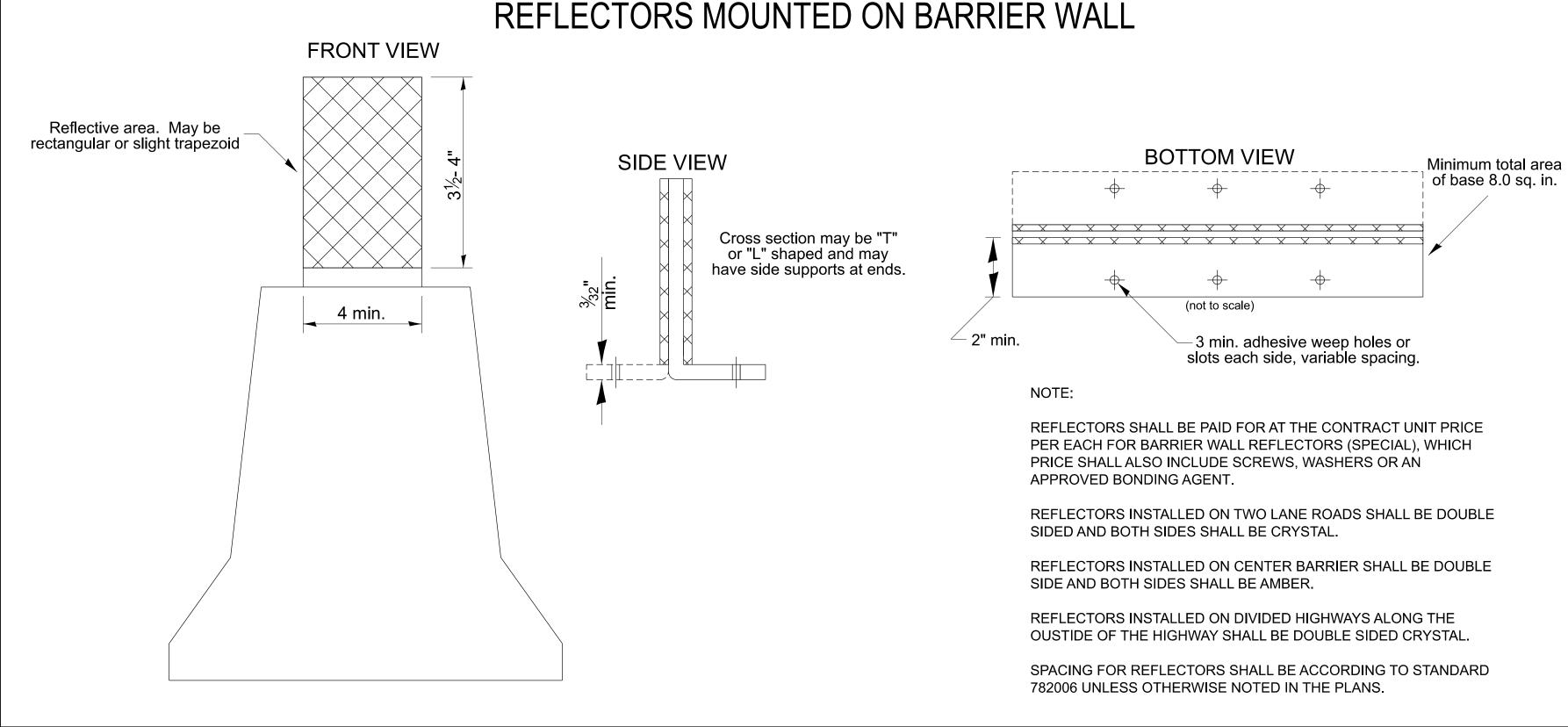


DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHECD AS SHOWN ABOVE.









REGION 2 / DISTRICT 2 STANDARD

SHEETS STA.

TO STA.

SHEET 55

SCALE:

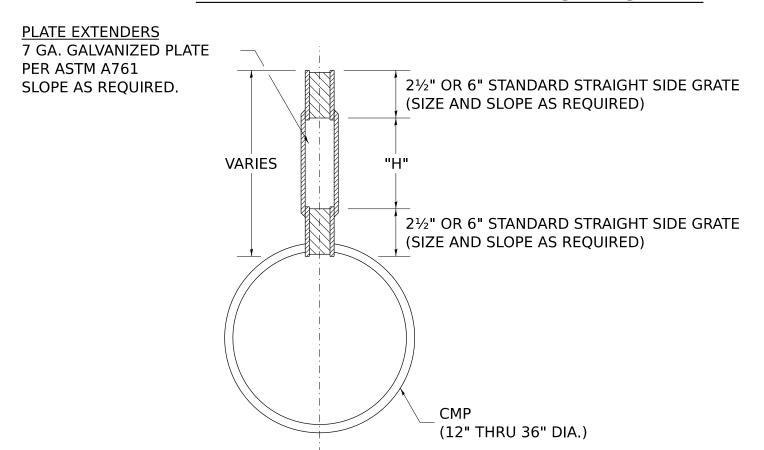
ILLINOIS | FED. AID PROJECT

CONTRACT NO.

TOTAL SHEET NO.

2½" OR 6" STANDARD STRAIGHT SIDE GRATE LOADING MAX. EXTENDER CONDITION HEIGHT - "H" H20/H25 750 PSI 19" CONCRETE * 125 PSI TIRE PRESSURE (12" THRU 36" DIA.) **MAXIMUM 1% GRADE SIDE VIEW**

DETAIL WITH VARIABLE HEIGHT GRATE



SECTION A-A

GENERAL

Class SI Concrete shall be used throughout.

This specification covers Slottted Drain used for the removal of water as shown on the plans.

The Slotted Drain shall be Corrugated Pipe Culvert with Integral Slotted Drains.

Before placing the concrete adjacent to the pipe, the slot shall be covered by either thin, flat metal sheeting or by a board notched to fit over the grate bars. This covering must fit closely in the slot to prevent entry of concrete into the pipe. Paving over the slotted drain will then be one continuous operation over the protected drain. The protection for the drain slot shall then be removed. The pipe shall drain into the side of the inlet. The opening where the slot

is removed shall be covered to prevent concrete from entering the pipe. The Corrugated Steel Pipe used in the Slotted Drain shall meet the requirements of AASHTO

M36/ASTM A760. The CMP shall be ALUMINIZED STEEL Type 2.

The diameter shall be as shown on the plans.

Steel grating shall meet the galvanizing requirements of AASHTO M111.

This work will be paid for at the contract unit price per foot for SLOTTED DRAIN of the pipe diameter specified WITH VARIABLE SLOT, or SLOTTED DRAIN, of the pipe diameter specified, WITH 6" SLOT,

and shall include concrete and grating for depth specified on plans. Use approved end cap to prevent concrete entry into the pipe during gutter construction on the upstream end of the pipe.

CONNECTIONS

The Corrugated Steel Pipe shall have a minimum of two rerolled annular ends.

The Slotted Drain bands shall be modified HUGGER Bands to secure the pipe and prevent infiltration of the backfill.

<u>GRATES</u>

The grates shall be manufactured from ASTM A670, Grade 36 steel. The spacers and bearing bars (sides) shall be 3/16 " material ± 0.008 ".

When the Slotted Drain is banded together, the adjacent grates shall have a maximum 3" gap.

The spacers shall be on 6" centers and welded on both sides to each bearing bar (sides) with four (4) 1- 1/4 " long 3/16 " fillet welds on each side of the bearing bar.

The plate extender shall be 7 gage steel meeting ASTM A761.

The engineer may call for tensile strength tests on the grate if the grate is not in compliance with the above spacer specifications. If tensile strength tests are called for, minimum results for an in-place spacer pulled perpendicular to the bearing bar shall be:

T= 12,000 pounds for 2- 1/2 " grate T= 15,000 pounds for 6" grate

GALVANIZING

The grate and plate extenders shall be galvanized in accordance with ASTM A123 except with a 2 oz. galvanized coating.

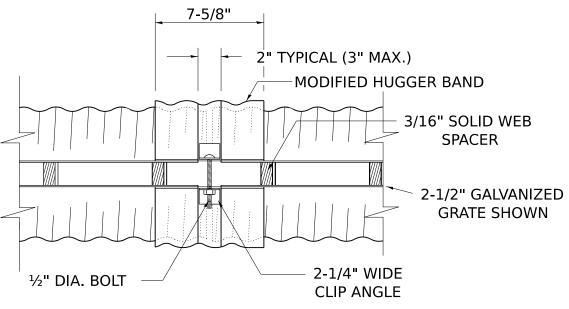
GRATE ATTACHED TO CSP

The grate shall be fillet welded with a minimum weld 1" long to the CSP on each side of the grate at every other corrugation.

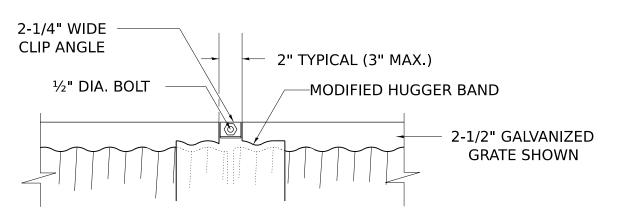
TOLERANCES - FINISHED SLOTTED DRAIN - 20' LENGTHS

Vertical Bow= \pm 3/8 " Horizontal Bow = \pm 5/8 " Twist= \pm 1/2 "

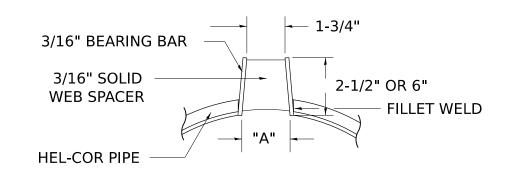
SLOTTED DRAIN PIPE



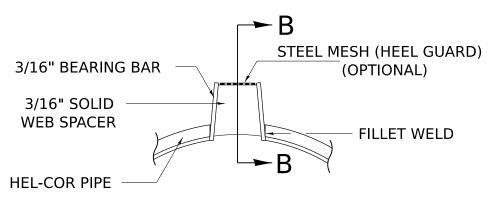
TOP VIEW



SIDE VIEW



SECTION A-A STANDARD DETAIL



SECTION A-A DETAIL WITH MESH

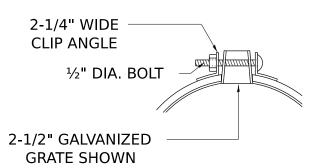
(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

GAGE OF										
PIPE	12"	15"	18"	24"	30"	36"		VEI		
16	Х	Х	Х	Х	Х	Х		TR		
14	Х	Х	Х	Х	Х	Х		TR		
12	N.A.	N.A.	N.A.	N.A.	Χ	Χ				

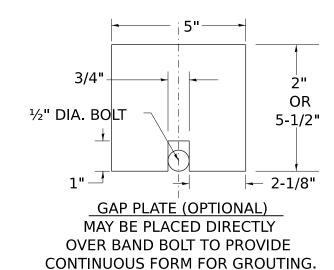
_	RATE TYPE	"A"				
VERT	1-3/4"					
VERT	6"	1-3/4"				
TRAP	2-1/2"	2-1/4"				
TRAP	6"	3"				
VERT = VERTICAL TRAP = TRAPIZOIDAL						

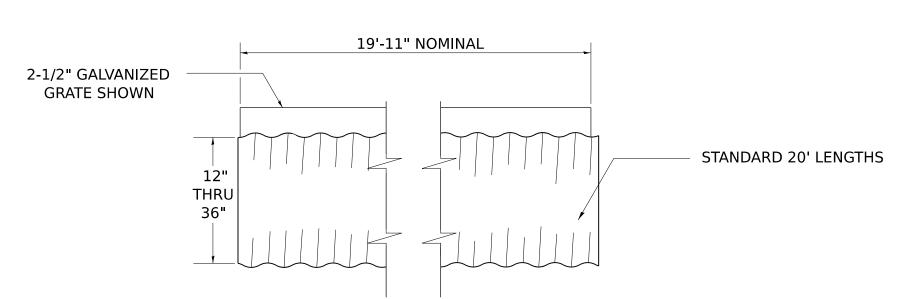
SLOTTED DRAIN NOTES

- 1. GRATING IS AVAILABLE IN DEPTHS OF 2-1/2" AND 6".
- 2. VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
- 3. FOR 6" VERTICAL & TRAPIZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 4" TECHCO BAND ANGLE.
- 4. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- 5. DIMENSIONS FOR H AND H AS REQUIRED.
- 6. H AND H MEASURED FROM TOP OF GRATE TO BOTTOM OF GRATE.

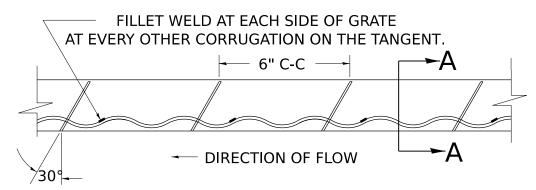


END VIEW

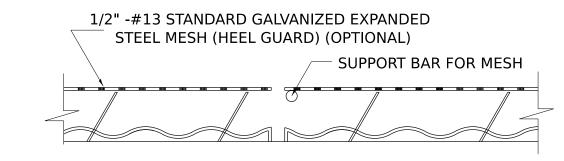




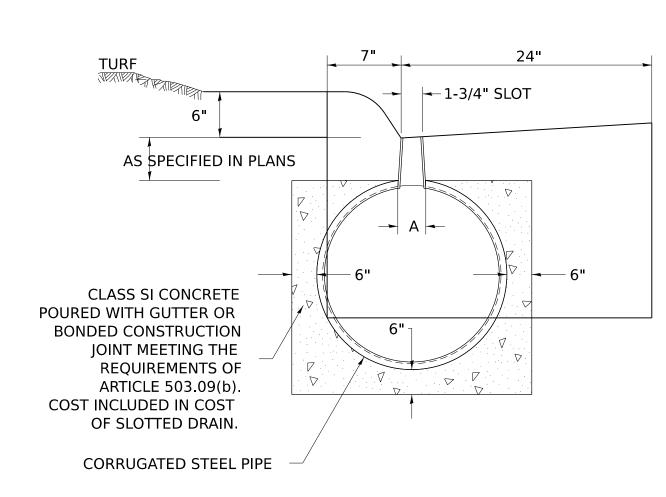
TYPICAL PIPE SECTION



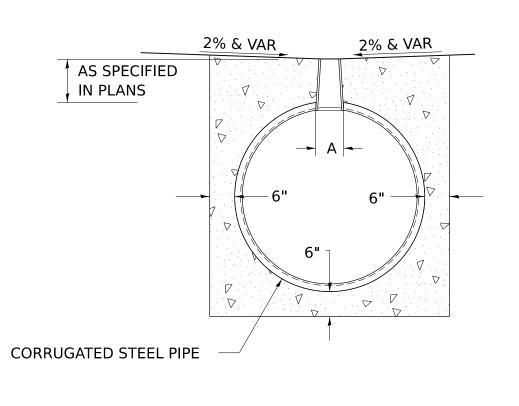
GRATE WELDING DETAIL



SECTION B-B



DETAIL FOR CURB & GUTTER



DETAIL FOR CROSSOVERS, DRIVEWAYS, OR PARKING LOTS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 1-05-16	
	DRAWN -	REVISED - 6-27-14	STATE OF ILLINOIS
	CHECKED -	REVISED - 10-18-11	DEPARTMENT OF TRANSPORTATION
PLOT DATE = 4/17/2025	DATE -	REVISED -	

RTATION	
MIALION	

SCALE:

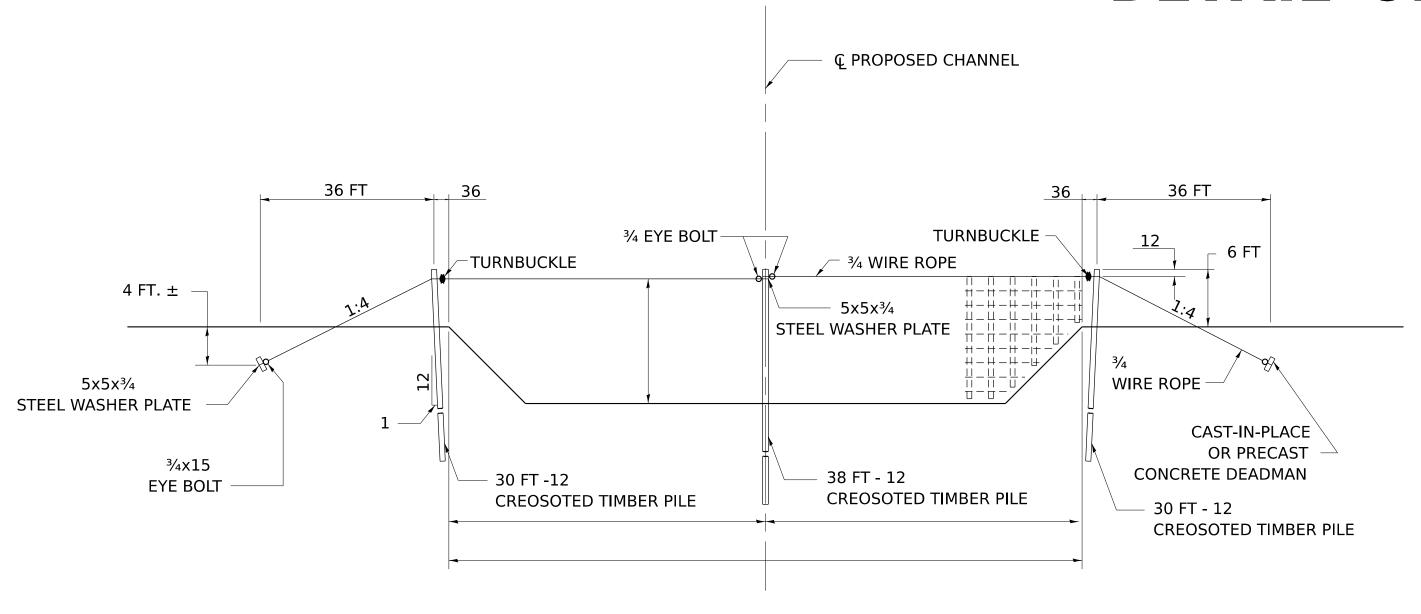
 DEGLO				nn.	F.A. RTE.	SECTION	COUNT
REGIO	N 2 / DI						
							CONTR
SHEET 56	OF	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT

TOTAL SHEET SHEETS NO.

COUNTY

CONTRACT NO.

DETAIL OF FLOOD GATE



QUANTITIES FOR 2 DEADMEN

QUANTITIES FOR 2 DEADMEN

PRECAST CONCRETE DEADMEN AND CAST-IN-PLACE CONCRETE

DEADMEN SHALL BE CONSTRUCTED OF CLASS SI CONCRETE

0.7 CU. YD. CLASS SI CONCRETE

QUAN. UNIT

BILL OF MATERIALS

FT 3/4 DIA. GALVANIZED WIRE ROPE

EACH ³/₄ DIA. x 15 GALVANIZED EYE BOLTS

WITH NUTS AND WASHERS

EACH 3/4 DIA. GALVANIZED TURNBUCKLES

EACH 3/4 DIA. GALVANIZED CABLE CLAMPS

EACH PRECAST CONCRETE DEADMEN OR

CAST-IN-PLACE CONCRETE DEADMEN

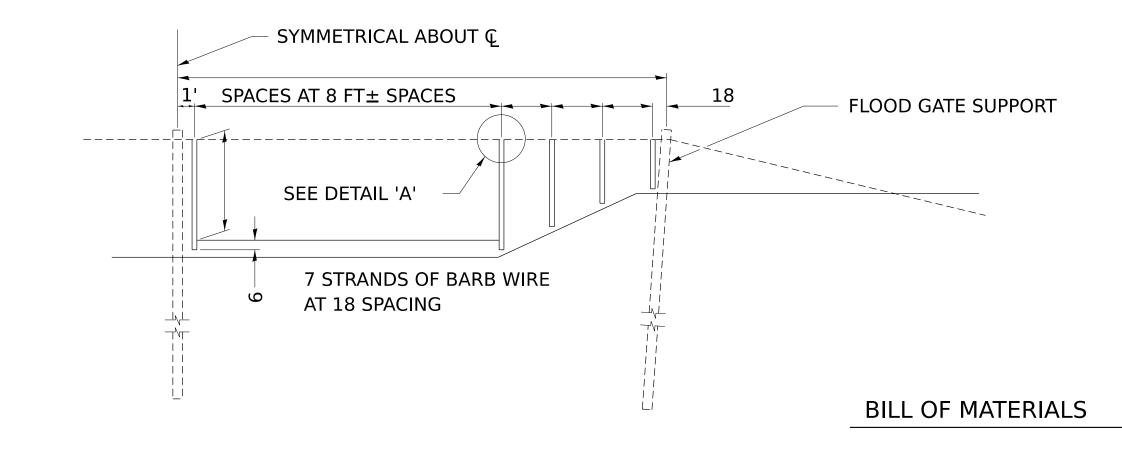
(INCLUDES FURNISHING AND DRIVING TIMBER PILE)

EACH 5x5x3/4 STEEL WASHER PLATES

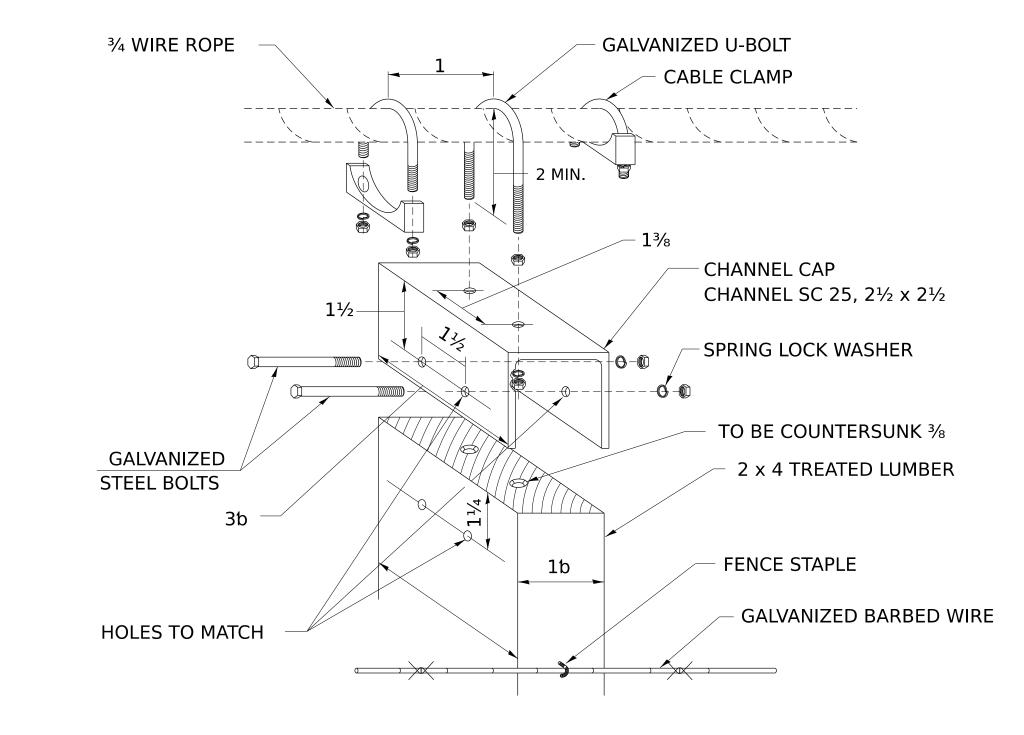
FT 12 CREOSOTED TIMBER PILE

ITEM

0.3 CU.YD CLASS SI CONCRETE 36 LBS REINFORCEMENT BARS



<u>ITEM</u> QUANTITY UNIT THIS WORK WILL BE PAID FOR AT THE FT 2 x 4 TREATED LUMBER CONTRACT UNIT PRICE PER EACH FOR FT GALVANIZED BARBED WIRE SPECIAL STEEL CHANNEL FT SC 25, 2½ x 2½ EACH 3/8 x 3 GALVANIZED STEEL BOLTS AND WASHERS 3/8 x 2 GALVANIZED EACH STEEL U-BOLTS GALVANIZED CABLE CLAMPS **EACH** GALVANIZED FENCE STAPLES



DETIAL IAI TO CABLE

	DETIAL 'A'
-	EXPLODED VIEW OF FLOOD GATE 1

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 8-09-12						F.A.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD			IXIL.		OTILLIO	STILL 13 NO.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION							CONTRACT	ΓNO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 57 OF	SHEETS STA.	TO STA.		ILLINOIS FE'	ر. AID PROJECT	

1½ DIA. HOLE -

#4 BARS 27 LONG

DETAIL OF PRECAST CONCRETE DEADMAN

/15° MIN.

DETAIL OF CAST-IN-PLACE CONCRETE DEADMAN

NOTE:

AT 5 CENTERS

ALL DIMENSIONS ARE IN INCHES UNLESS

OTHERWISE NOTED.

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

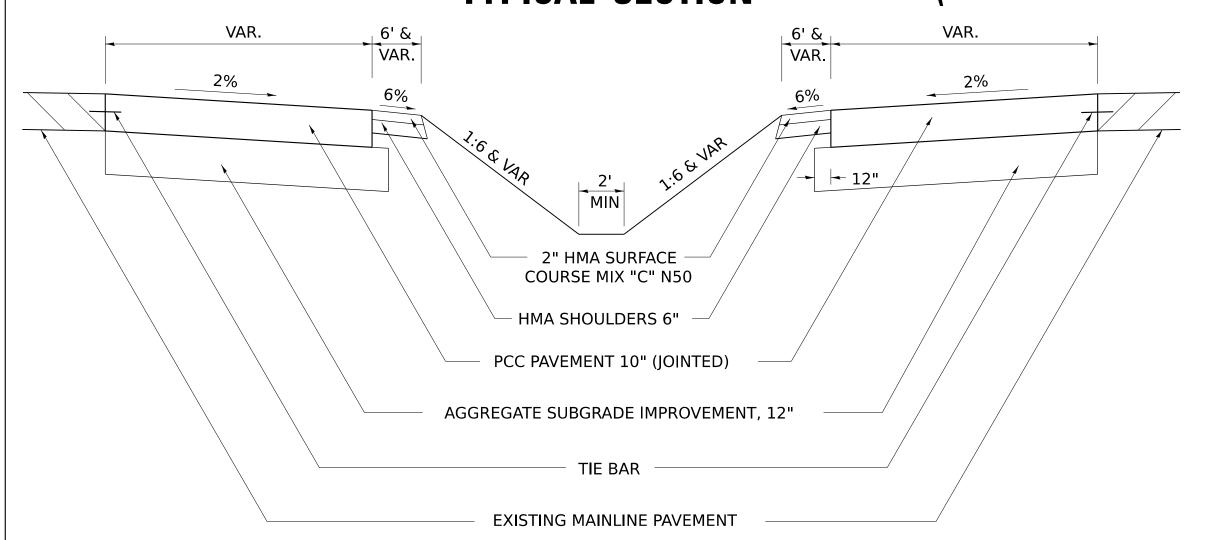
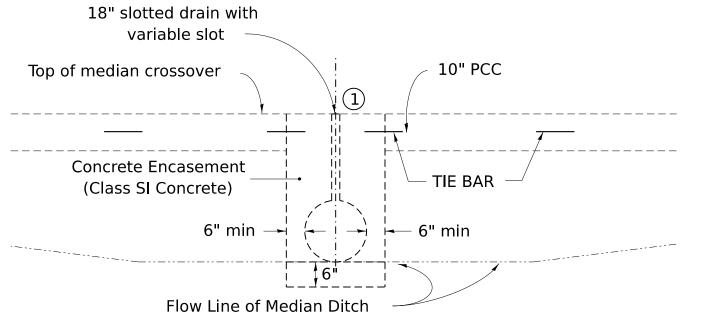
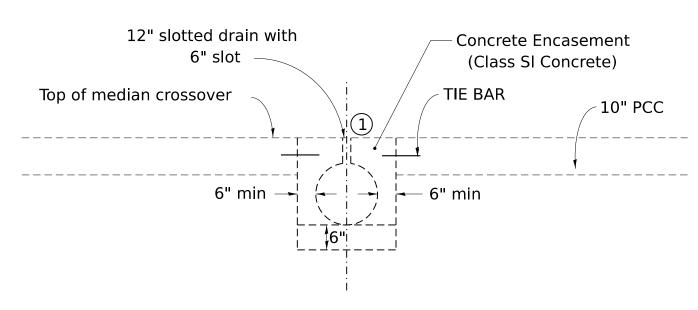


TABLE OF OFFSETS AND DROPS									
Distance feet from location station	0	60' B	75'	100'	125'	143.73'			
Offsets feet from inside edge of pavement	20'	18'	15.32'	11.37'	8.06'	6.00'			
Drop feet from inside edge of pavement	0.0'	0.0'	0.0'	0.0'	0.0'	0.0'			



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1340.88 Sq. Yds.)
AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1250.80 Sq. Yds.)
P.C.C. PAVEMENT 10" (JOINTED)
2" HMA SURFACE COURSE, MIX "C", N50

(402.52 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

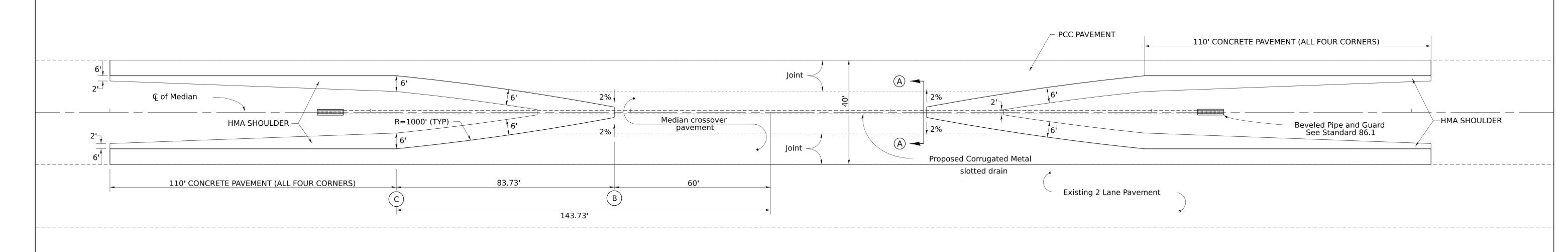
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19	CTATE OF HILINOIS			F.A. SECT	TION	COUNTY TOTAL SHEET SHEETS NO.
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD			
	CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED - 12-07-10		SCALE:	SHEET 58 OF SHEETS STA. TO STA.		ILLINOIS FED. AID) PROJECT

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

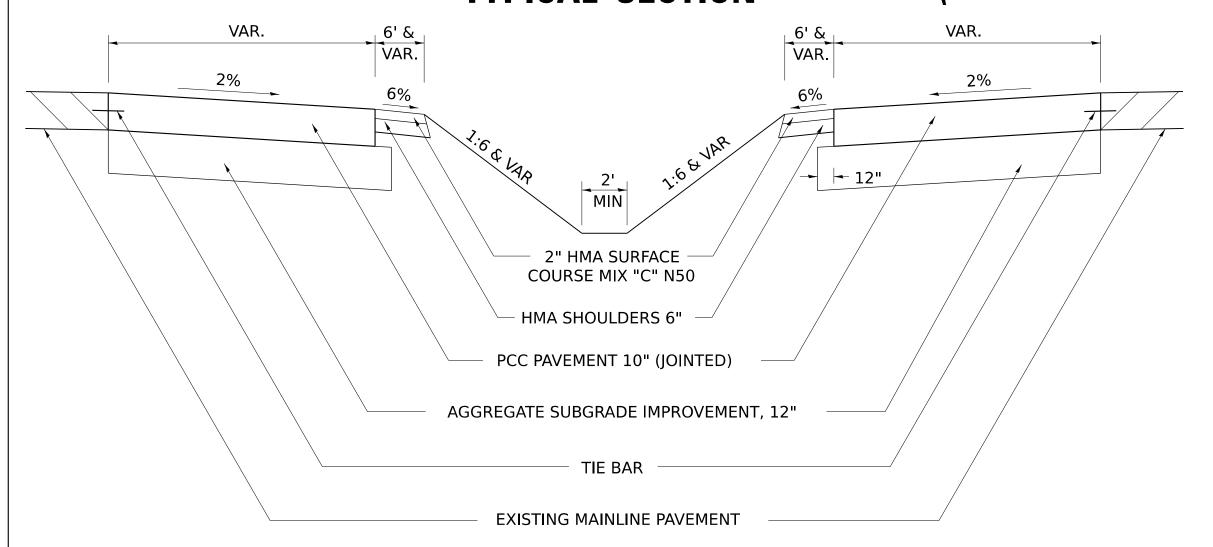
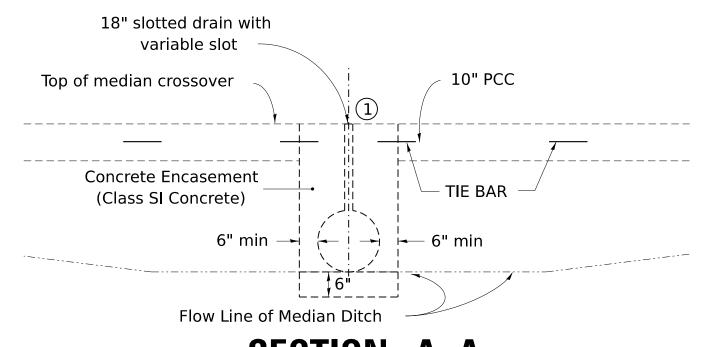
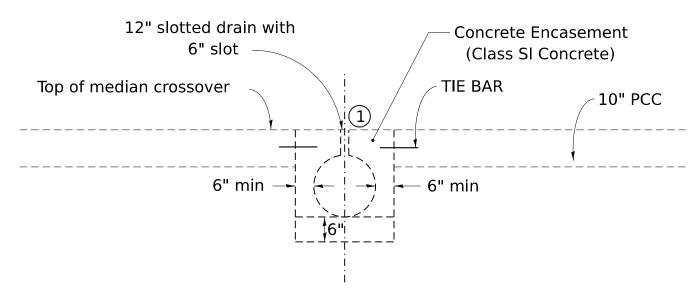


TABLE OF OFFSETS AND DROPS										
Distance feet from location station	0'	53' B	75'	100'	125'	150.00'	161.73'			
Offsets feet from inside edge of pavement	25' Q	23'	18.57'	14.14'	10.37'	7.25'	6.00'			
Drop feet from inside edge of pavement	0.5'	0.46'	0.37'	0.28'	0.021'	0.15'	0.12'			



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1634.94 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1533.52 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(52.9 Tons) 2" HMA SURFACE COURSE, MIX "C", N50 HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

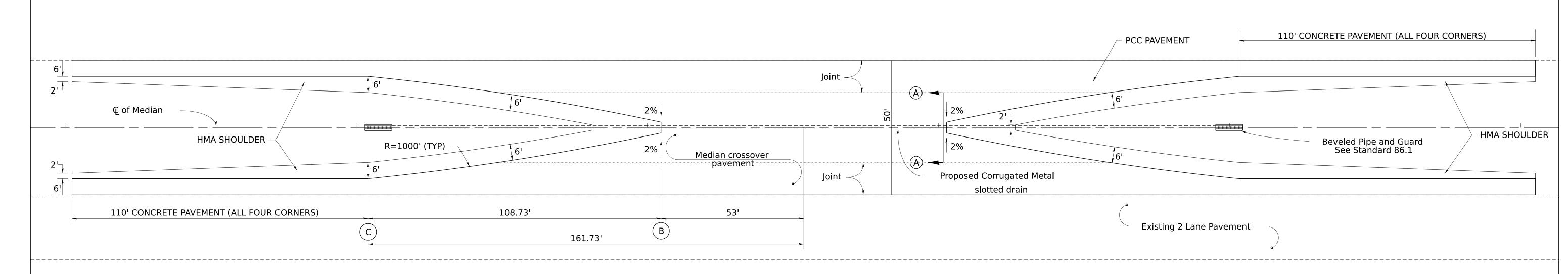
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

2									
<u>ii</u>	USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A.	SECTION	COUNTY TOTAL SHEET
PLOT DATE = 4/17/2025		DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	IVIE.		STILL TO THE.
		CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION			CONTE		CONTRACT NO.
	PLOT DATE = 4/17/2025	DATE -	REVISED - 12-07-10		SCALE:	SHEET 59 OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT	

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

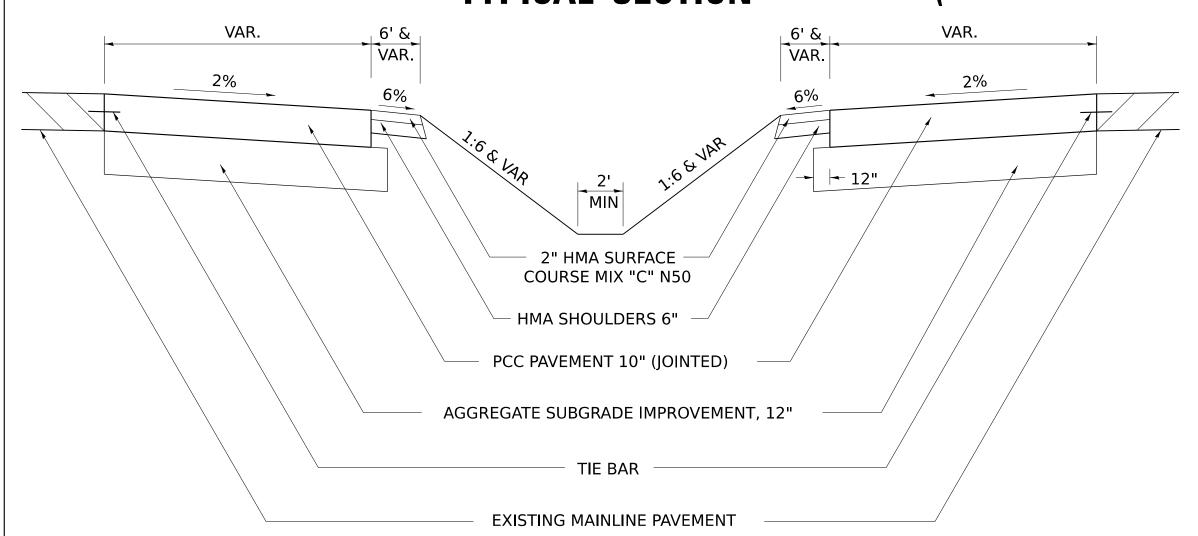
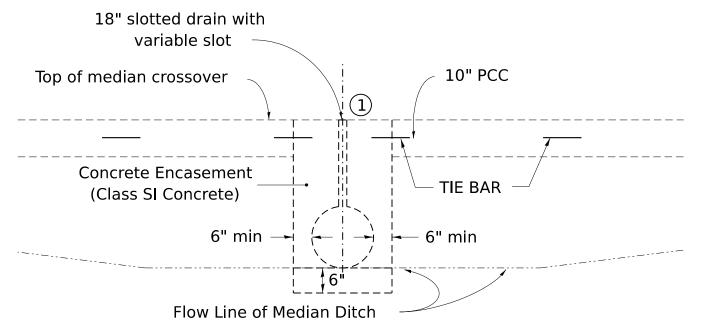
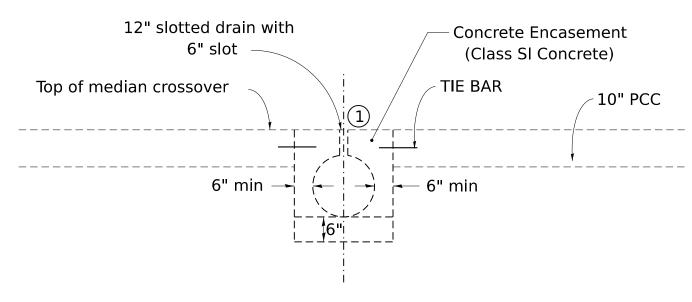


TABLE OF OFFSETS AND DROPS									
Distance feet from location station	0	46' (B)	50'	75'	100'	125'	150'	175'	185.20'
Offsets feet from inside edge of pavement	32'	30'	29.02'	23.32'	18.28'	13.90'	10.17'	7.08'	6'
Drop feet from inside edge of pavement	0.64'	0.6'	0.58'	0.47'	0.37'	0.28'	0.20'	0.14'	0.12'



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



1 Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2071.96 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1956.64 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED) (62.5 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(558.24 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

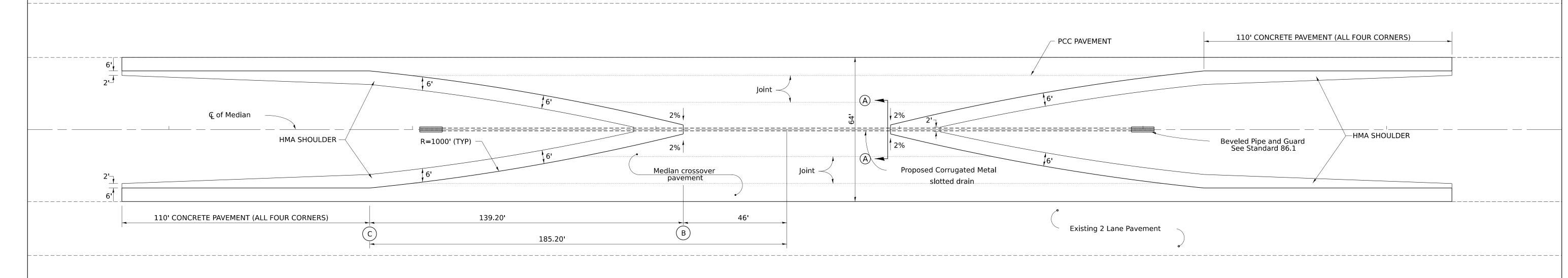
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19	CTATE OF ILLINOIS			F.A. RTE	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD				
	CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION					CONTRACT	ī NO.
PLOT DATE = 4/17/2025	DATE -	REVISED - 12-07-10		SCALE:	SHEET 60 OF SHEETS STA. TO STA.		ILLINOIS FED. A	ID PROJECT	

TYPICAL SECTION

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

125'

0.23'

150'

8.98'

0.18'

TABLE OF OFFSETS AND DROPS

77'

 \bigcirc B

18'

0.36'

0.4'

100'

14.79'

0.3'

AGGREGATE SUBGRADE IMPROVEMENT, 12"

6' & VAR

175'

6.67'

0.13'

183.23

0.12'

(C)

2%

VAR.

2%

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1709.35 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1596.03 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(1596.03 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED) (57.1 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(509.64 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

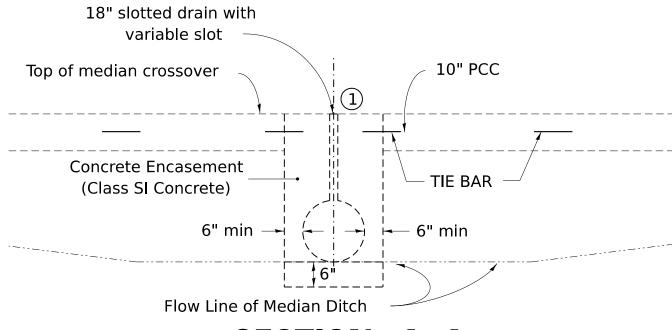
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

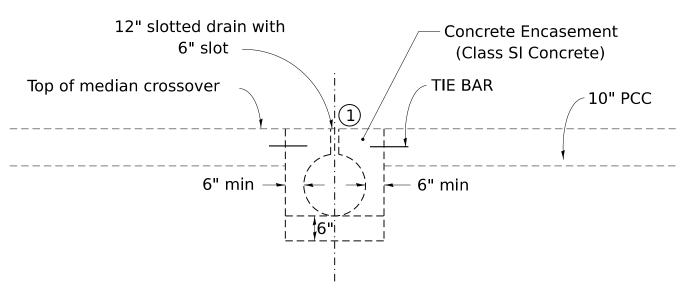
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

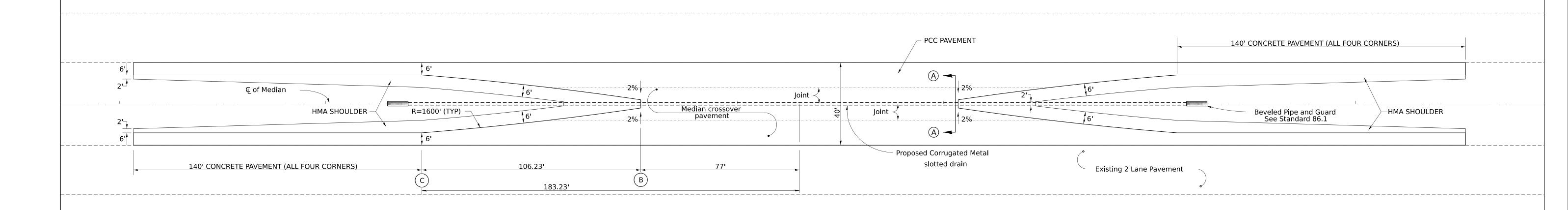
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19	STATE OF ILLINOIS						F.A. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.		
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD							_		
PLOT DATE = 4/17/2025	CHECKED - DATE -	REVISED - 6-27-14 REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION	SCALE:	SHEET 61	OF	SHEETS	STA.	TO STA.		ILLINOIS FE	CONTRACED. AID PROJECT	CT NO.	_

TYPICAL SECTION

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

TABLE OF OFFSETS AND DROPS

100'

17.97'

0.36'

125'

14.50'

0.29'

150'

11.43'

0.23'

75'

21.84'

0.44'

68'

 \bigcirc B

23'

0.46'

0.5'

AGGREGATE SUBGRADE IMPROVEMENT, 12"

6' & VAR

175'

0.175'

200'

6.49'

0.13'

206.02'

0.12'

<u>C</u>

VAR.

2%

VAR.

2%

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal

roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(67.1 Tons)

(598.67 Sq. Yds.)

(2084.0 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1956.55 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

2" HMA SURFACE COURSE, MIX "C", N50

HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

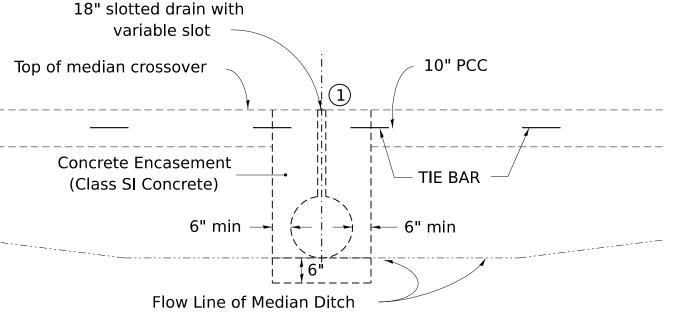
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

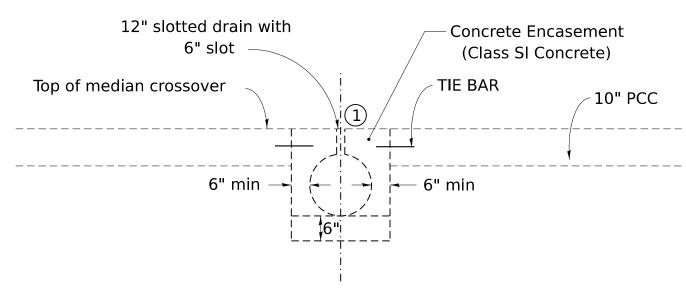
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

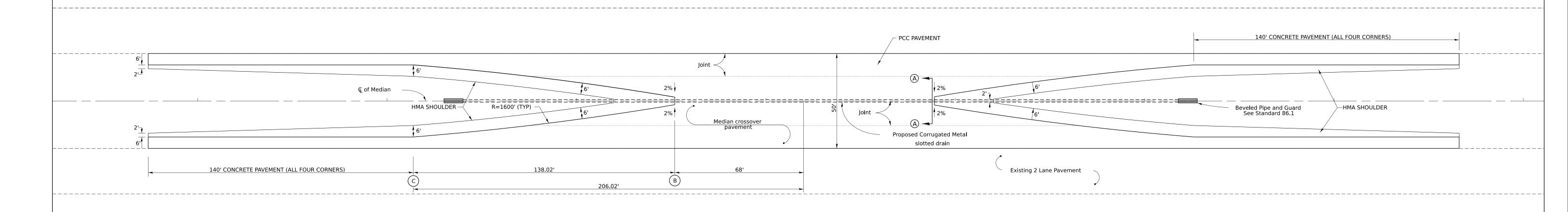
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

STATE OF ILLINOIS	
RTMENT OF TRANSPORTATION	

SCALE:

	REGION 2 / DISTRICT 2 STANDARD									
REGION 2 / DISTRICT 2 STANDARD										
	SHEET 62	OF	SHEETS	STA	TO STA	-		-		

TYPICAL SECTION

AGGREGATE SUBGRADE IMPROVEMENT, 12"

TIE BAR

EXISTING MAINLINE PAVEMENT

60'

32'

0.64'

 \bigcirc B

30'

0.6'

75'

27.18'

0.54'

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

TABLE OF OFFSETS AND DROPS

100'

22.80'

0.456'

125'

18.84'

0.377'

150'

15.27

0.31'

175'

12.11

0.24'

200'

9.35'

0.187'

225'

6.98

0.139'

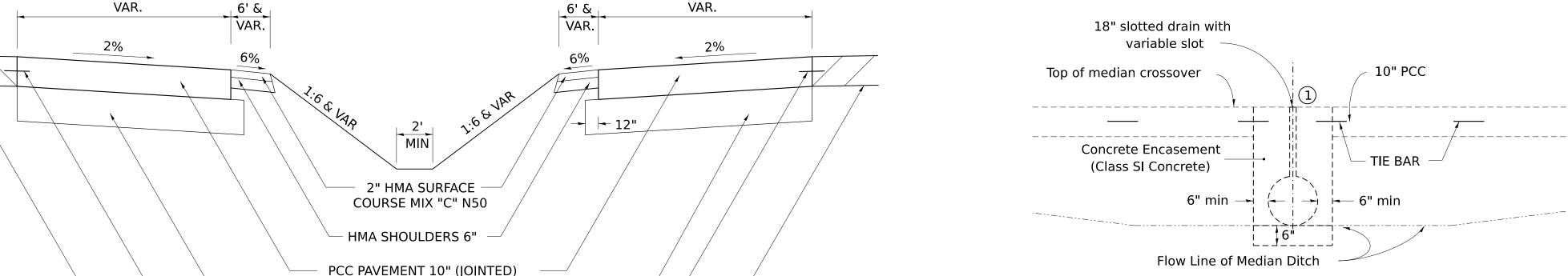
236.83'

(C)

0.12'

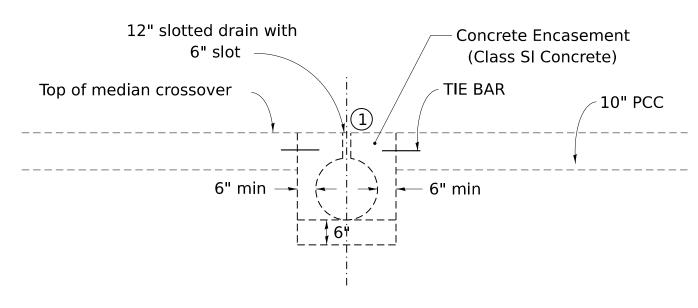
(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2651.79 Sq. Yds.)
(2509.74 Sq. Yds.)
(79.2 Tons)
(707.03 Sq. Yds.)
AGGREGATE SUBGRADE IMPROVEMENT, 12"
P.C.C. PAVEMENT 10" (JOINTED)
2" HMA SURFACE COURSE, MIX "C", N50
HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

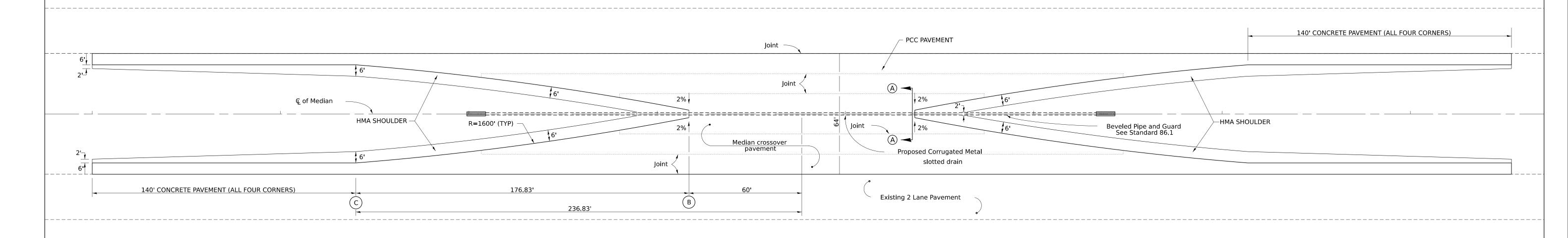
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19	
	DRAWN -	REVISED - 1-05-16	
	CHECKED -	REVISED - 6-27-14	
PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13	

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

	F.A. RTE.	SECTI					
	KEC	510N 2 / L	DISTRICT 2	2 STANDA	RD		
SCALE:	SHEET 6	3 OF	SHEETS	STA.	TO STA.		

TYPICAL SECTION (POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

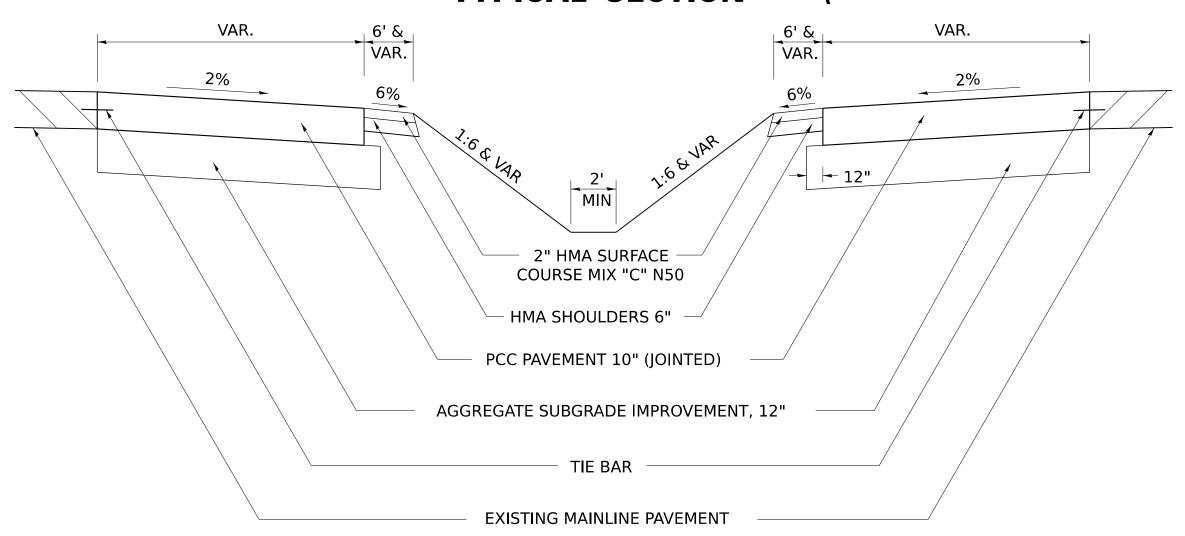
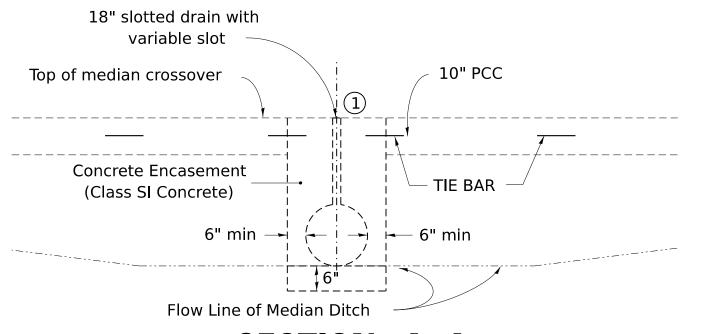
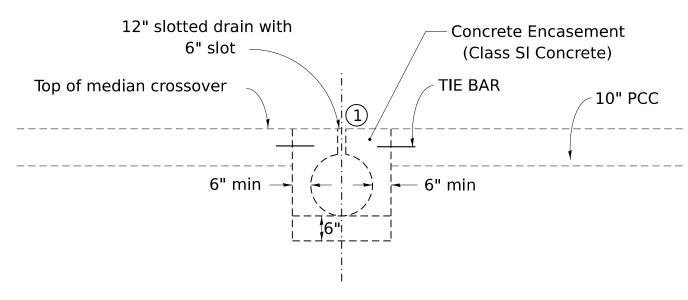


TABLE OF OFFSETS AND DROPS												
Distance feet from location station	0	50'	75'	100'	125'	150'	175'	200'	225'	250'	275'	283.50'
Offsets feet from inside edge of pavement	44' ©	42'	36.44'	31.30'	26.57'	22.25'	18.34'	14.83'	11.72'	9.01'	6.70'	6'
Drop feet from inside edge of pavement	0.88'	0.84'	0.73'	0.63'	0.53'	0.43'	0.37'	0.30'	0.23'	0.18'	0.13'	0.12'



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(3704.06 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (3535.98 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED) (96.79 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(864.23 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

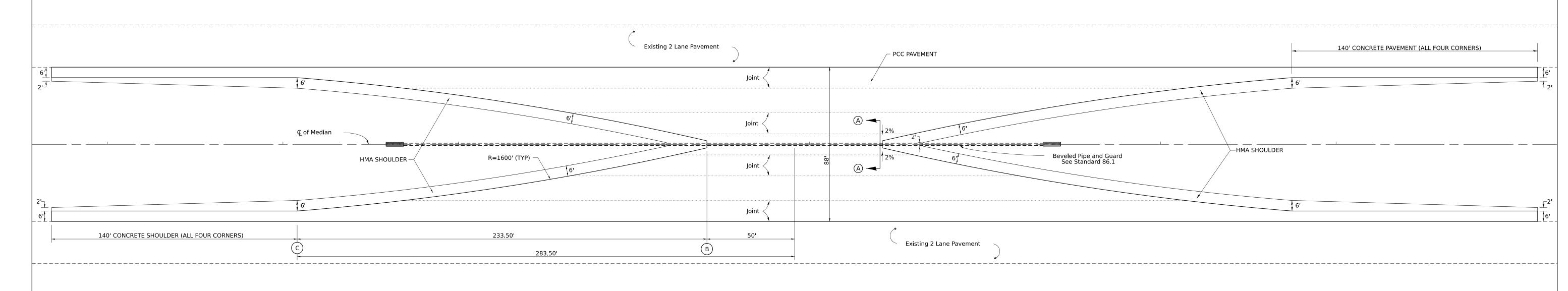
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

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78pt1 E: D		USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A. SECT	TION COUNTY	TOTAL S	SHEET
. AA			DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	IXIC.		OFFICETO	
ODE LE L			CHECKED -	REVISED - 6-27-14	DEPARTMENT OF TRANSPORTATION				CONTRAC	CT NO.	
žΙ	PLOT	PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13		SCALE:	SHEET 64 OF SHEETS STA. TO STA.				

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

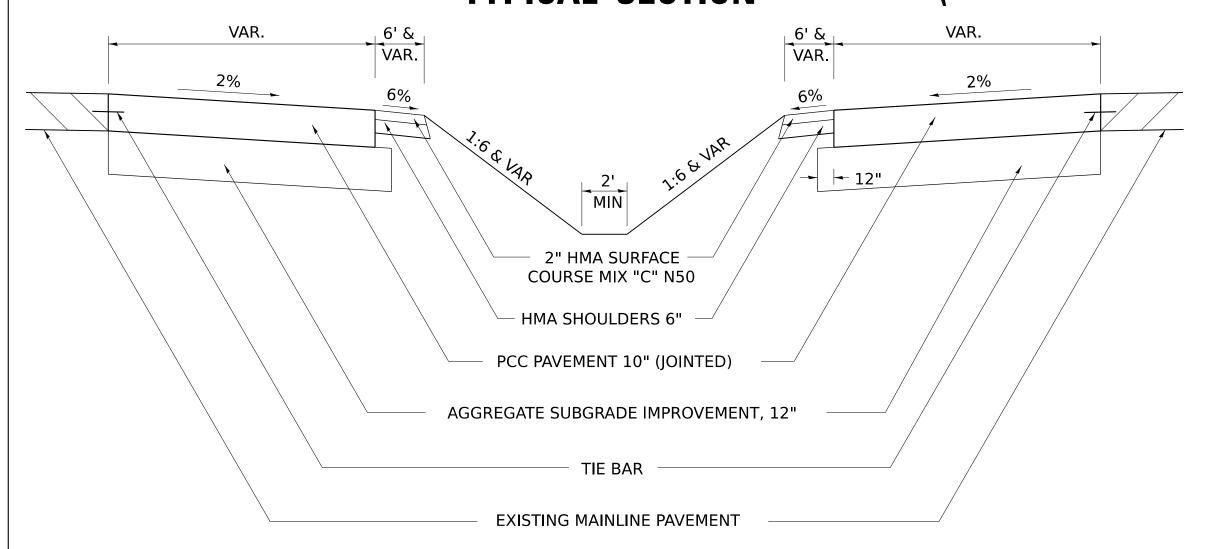
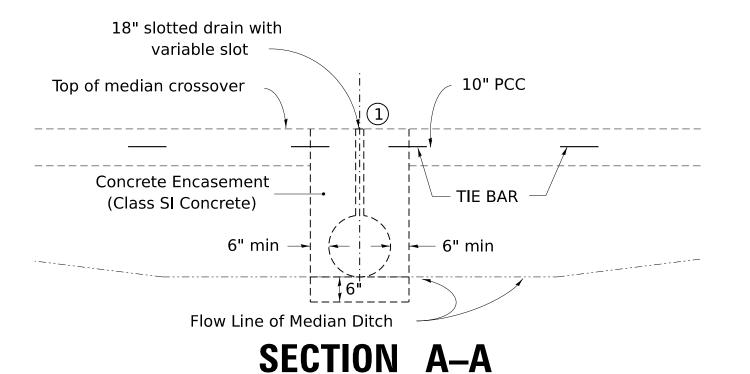
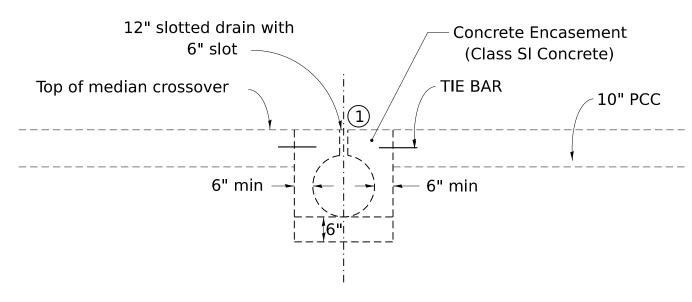


TABLE OF OFFSETS AND DROPS									
Distance feet from location station	0	76.95'	100'	125'	150'	168.69'			
Offsets feet from inside edge of pavement	20'	18'	14.22'	10.70'	7.79'	6.00'			
Drop feet from inside edge of pavement	0.4'	0.36'	0.28'	0.21'	0.16'	0.12'			



(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



1 Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

SLOTTED DRAIN 12" WITH 6" SLOT.

(1685.28 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1572.43 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(57.28 Tons) 2" HMA SURFACE COURSE, MIX "C", N50 (511.45 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the

See District Standard 61.2 or 68.1 for details for the slotted drain.

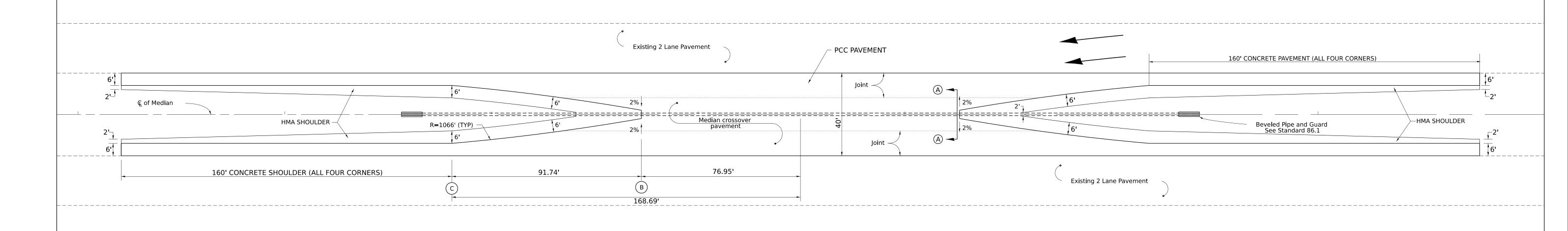
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19					F.A. RTE.	SECTION	COUNTY TOTAL SHEET NO.
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD				
	CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION						CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED - 4-04-11		SCALE:	SHEET 65 OF SHEETS STA.	TO STA.		ILLINOIS FED. AI	ID PROJECT

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

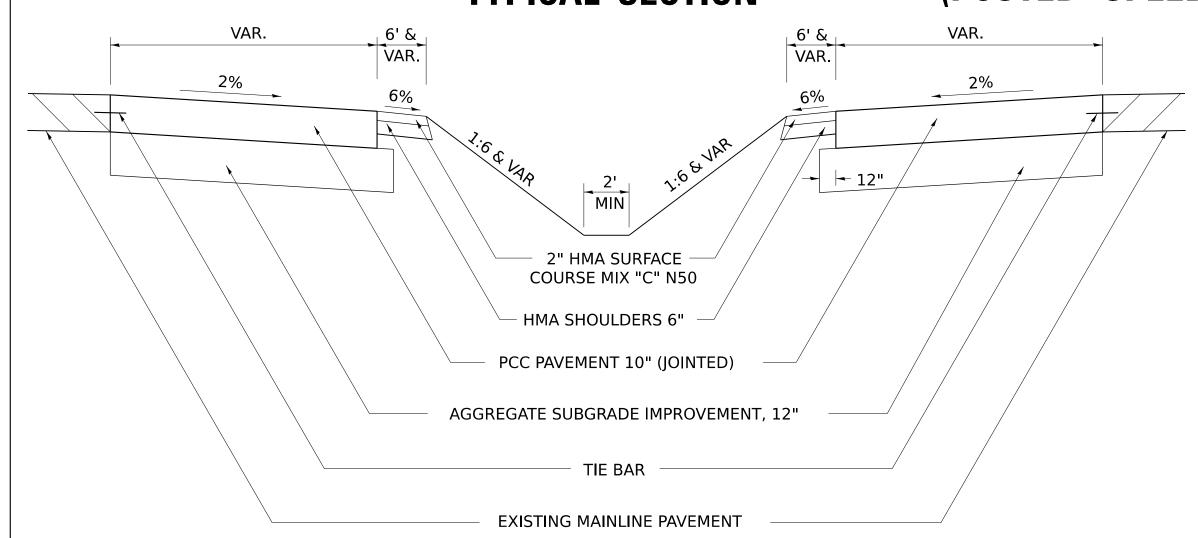
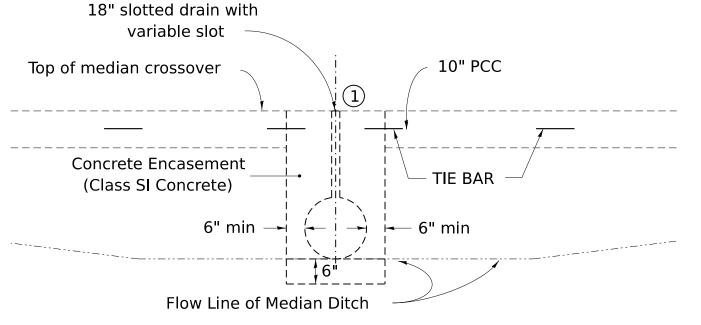
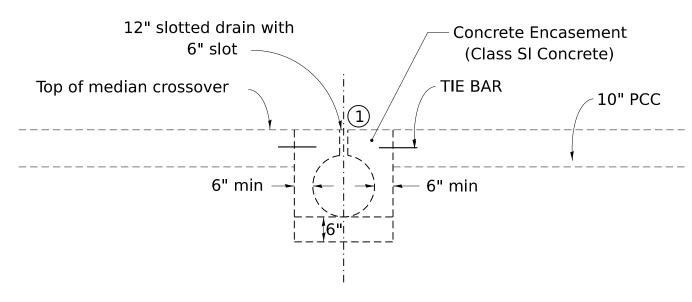


	TABLE OF OFFSETS AND DROPS										
Distance feet from location station	0	69.72'	75'	100'	125'	150'	175'	188.01'			
Offsets feet from inside edge of pavement	25' Q	23'	21.95'	17.35'	13.37'	9.99'	7.21'	6.00'			
Drop feet from inside edge of pavement	0.5'	0.46'	0.44'	0.35'	0.27'	0.20'	0.14'	0.12'			



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2029.23 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (1904.29 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED) (65.64 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(586.07 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

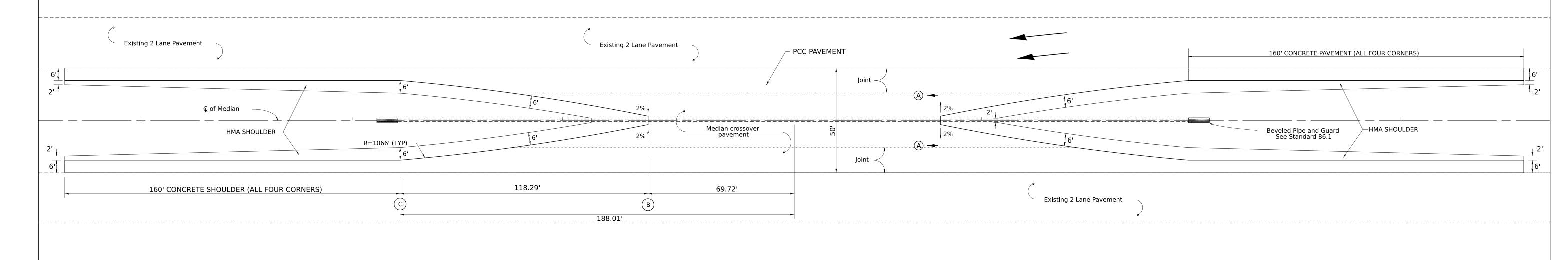
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A.	SECTION	COUNTY TOTAL SHEETS	SHEET
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	TATE.		OTILLIO	
	CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED - 4-04-11		SCALE:	SHEET 66 OF SHEETS STA. TO STA.		ILLINOIS FED.	. AID PROJECT	

TYPICAL SECTION

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

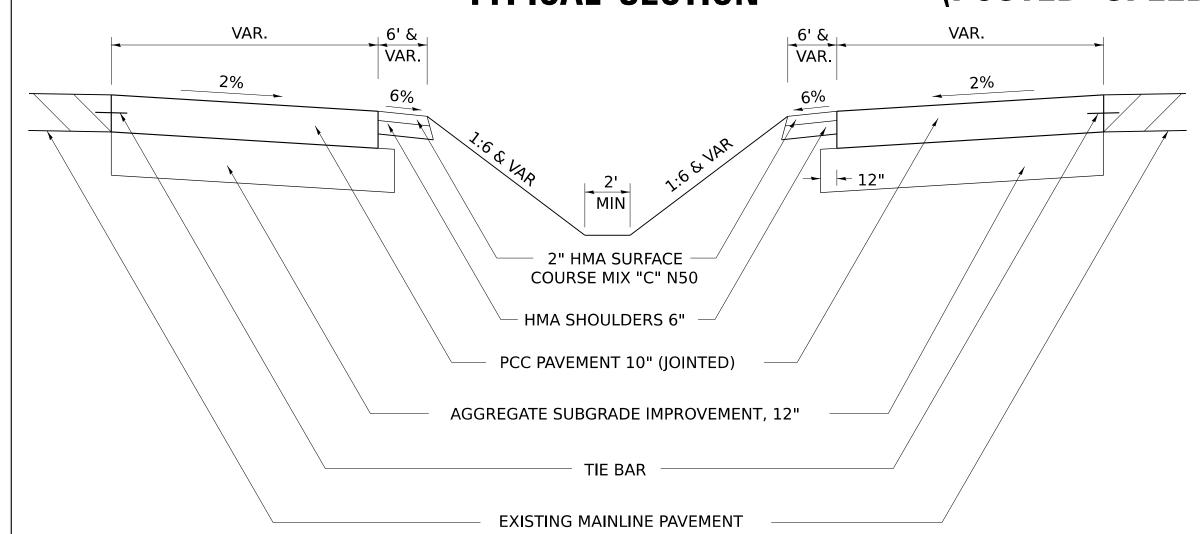
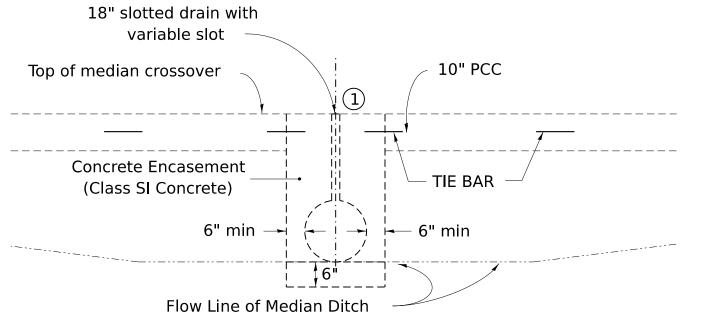
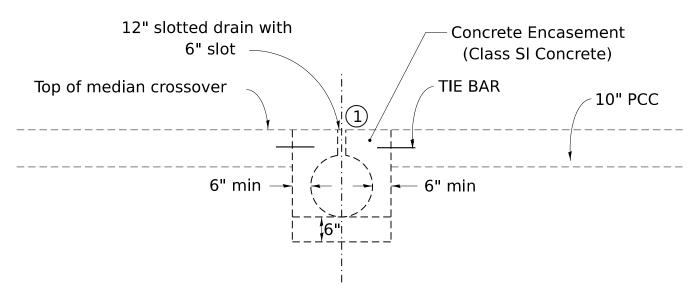


TABLE OF OFFSETS AND DROPS										
Distance feet from location station	0	62.41'	75'	100'	125'	150'	175'	200'	212.87'	
Offsets feet from inside edge of pavement	32'	30'	27.14'	21.92'	17.33'	13.35'	9.97'	7.20'	6.00'	
Drop feet from inside edge of pavement	0.64'	0.60'	0.54'	0.44'	0.35'	0.27'	0.20'	0.14'	0.12'	



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2534.76 Sq. Yds.)AGGREGATE SUBGRADE IMPROVEMENT, 12"(2394.89 Sq. Yds.)P.C.C. PAVEMENT 10" (JOINTED)(75.73 Tons)2" HMA SURFACE COURSE, MIX "C", N50

(676.15 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

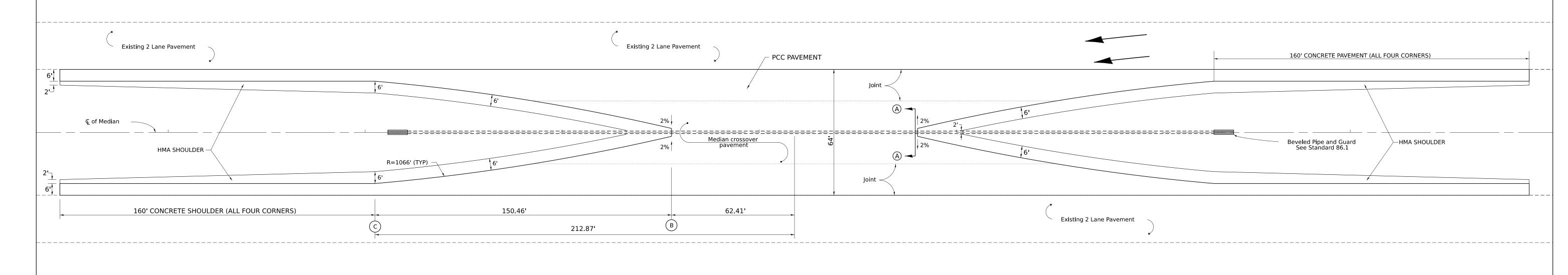
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A.	SECTION	COUNTY TOTAL SHEETS NO
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD	T(TE.		SHEETS NO.
	CHECKED -	REVISED - 8-27-13	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED - 4-04-11		SCALE:	SHEET 67 OF SHEETS STA. TO STA.		ILLINOIS FEI	D. AID PROJECT

TYPICAL SECTION

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

150'

12.07'

0.24'

200'

7.48'

0.15'

175'

9.60'

0.19'

220.57'

6.00'

0.12'

(C)

TABLE OF OFFSETS AND DROPS

100.33'

 \bigcirc B

18'

0.36'

0.40'

125'

0.30'

AGGREGATE SUBGRADE IMPROVEMENT, 12"

VAR.

2%

VAR.

2%

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2142.56 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (2003.87 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(71.01 Tons) 2" HMA SURFACE COURSE, MIX "C", N50 (634.04 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

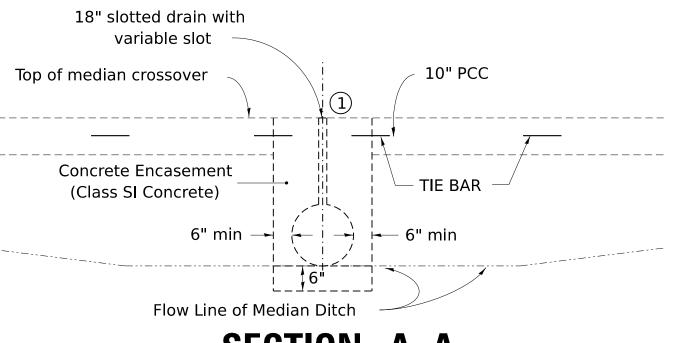
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

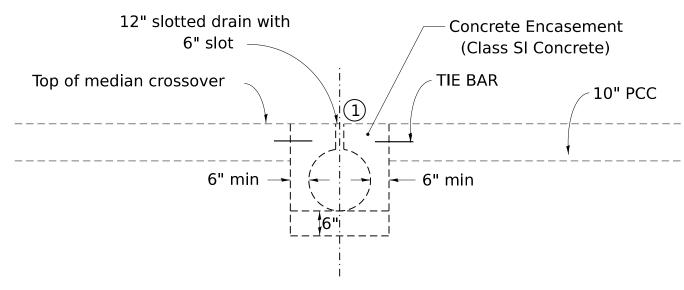
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

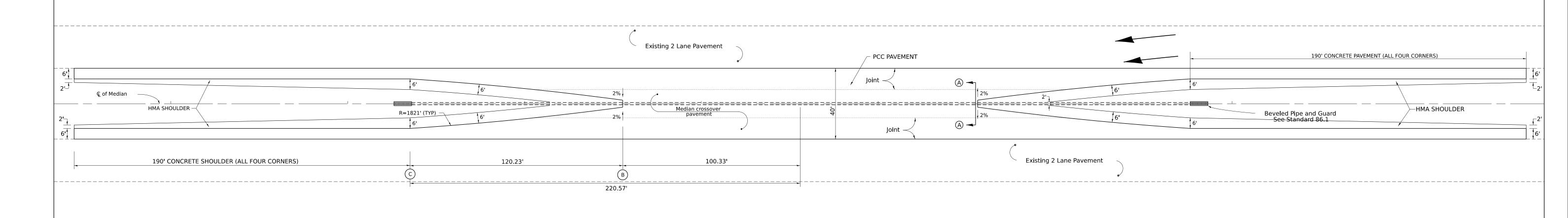
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



1 Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

					110 (1110 001111(02 01) (110) (110)	TO TO BE GOLD WITH		·-		
USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19					F.A.	SECTION	COUNTY TOTAL	SHEE
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD		1(12.		Officer	7 110.
	CHECKED -	REVISED - 6-27-14	DEPARTMENT OF TRANSPORTATION						CONTRACT NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13		SCALE:	SHEET 68 OF SHEETS STA.	TO STA.		ILLINOIS FE). AID PROJECT	

TYPICAL SECTION

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

100'

21.63'

0.43'

90.88'

 \bigcirc B

23'

0.46'

0.50'

TABLE OF OFFSETS AND DROPS

125'

18.10'

0.36'

150'

14.93'

0.30'

175'

12.11'

0.24'

200'

9.64'

0.19'

225'

7.52'

0.15'

246'

6.00'

0.12'

(C)

AGGREGATE SUBGRADE IMPROVEMENT, 12"

VAR.

2%

VAR.

2%

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2593.23 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (2438.79 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(81.92 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(731.46 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

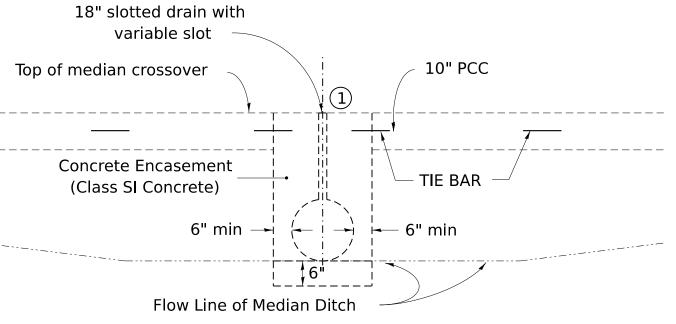
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

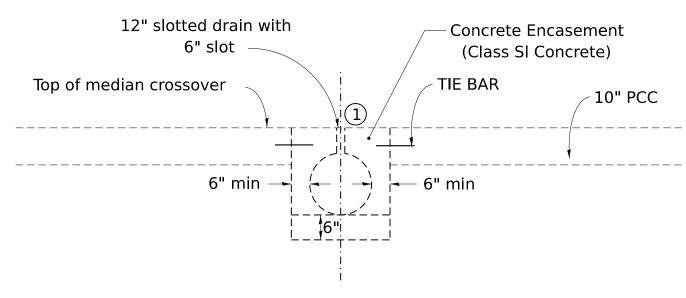
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

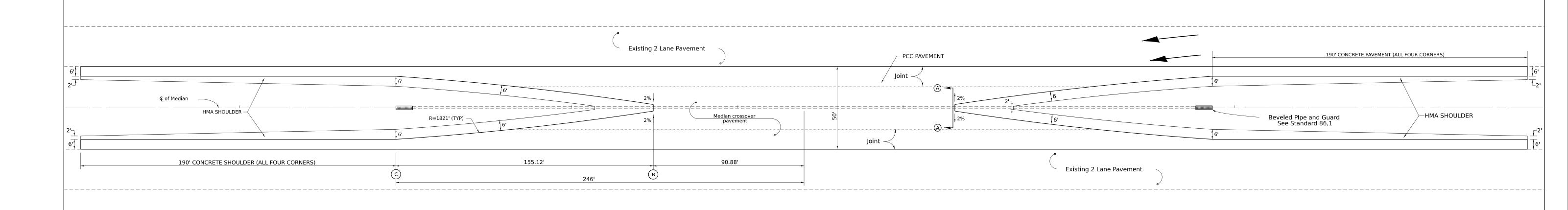
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

USER NAME = IDOT / DISTRICT 2	DESIGNED - DRAWN -	REVISED - 2-26-19 REVISED - 1-05-16	STATE OF ILLINOIS	REGION 2 / DISTRICT 2 STANDARD						F.A. RTE.
	CHECKED -	REVISED - 6-27-14	DEPARTMENT OF TRANSPORTATION							
PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13		SCALE:	SHEET 69	OF	SHEETS	STA.	TO STA.	

SECTION

ILLINOIS | FED. AID PROJECT

CONTRACT NO.

TYPICAL SECTION

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

125'

22.80'

0.46'

100'

0.54'

81.32'

32'

0.64'

 \bigcirc B

30'

0.60'

TABLE OF OFFSETS AND DROPS

150'

19.16'

0.38'

175'

15.88'

0.32'

200'

12.95'

0.26'

AGGREGATE SUBGRADE IMPROVEMENT, 12"

6' & VAR VAR.

2%

250'

0.16'

225'

10.37'

0.21'

275'

6.26'

0.13'

278.80'

(C)

6.00'

0.12'

VAR.

2%

Distance feet

from location

Offsets feet

from inside edge

of pavement

Drop feet

of pavement

from inside edge

station

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(3256.59 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (3082.80 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(95.09 Tons) 2" HMA SURFACE COURSE, MIX "C", N50

(848.99 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

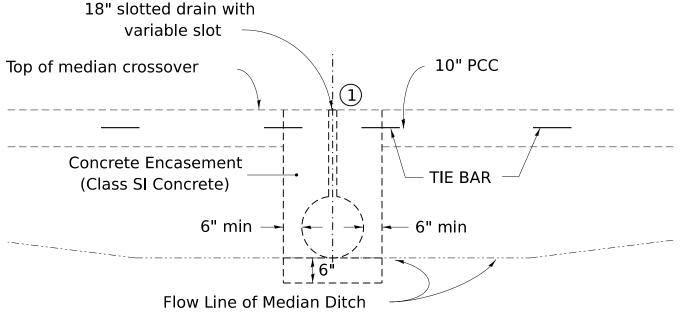
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

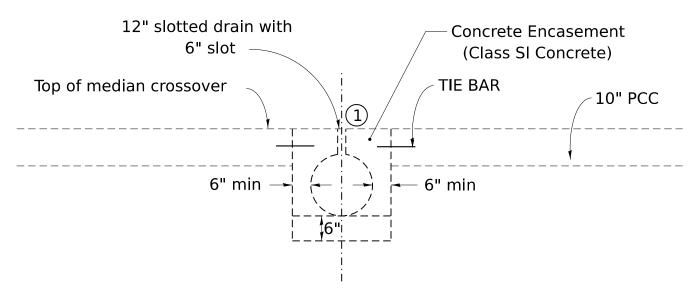
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

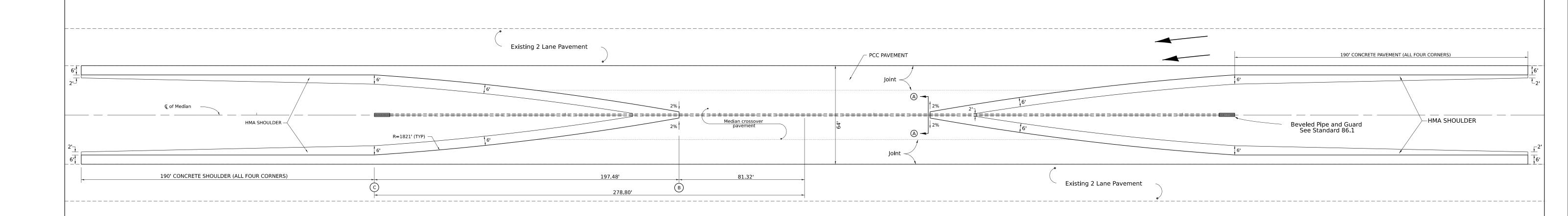
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD					
	CHECKED -	REVISED - 6-27-14	DEPARTMENT OF TRANSPORTATION					CONTRAC	T NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13		SCALE:	SHEET 70 OF SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT		

TYPICAL SECTION (POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

6 & VAR

2" HMA SURFACE —
 COURSE MIX "C" N50

- HMA SHOULDERS 6"

PCC PAVEMENT 10" (JOINTED)

TIE BAR

EXISTING MAINLINE PAVEMENT

TABLE OF OFFSETS AND DROPS

125'

31.23'

0.62'

150'

26.86'

0.54'

175'

22.86'

0.46'

100'

35.93'

0.72'

70.29'

 \bigcirc B

42'

0.84'

41.00'

0.82'

44'

0.88'

AGGREGATE SUBGRADE IMPROVEMENT, 12"

VAR.

225'

15.94'

0.32'

200'

19.22'

0.38'

250'

13.00'

0.26'

275'

10.42'

0.21'

8.18'

0.16'

325'

6.29'

0.13'

329.24'

(C)

6.00'

0.12'

2%

VAR.

2%

Distance feet

station

from location

Offsets feet

of pavement

Drop feet

of pavement

from inside edge

from inside edge

GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(4481.22 Sq. Yds.) AGGREGATE SUBGRADE IMPROVEMENT, 12" (4279.37 Sq. Yds.) P.C.C. PAVEMENT 10" (JOINTED)

(114.14 Tons) 2" HMA SURFACE COURSE, MIX "C", N50 (1019.14 Sq. Yds.) HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

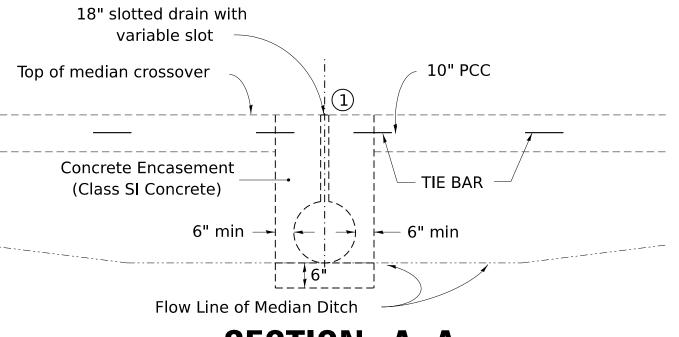
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

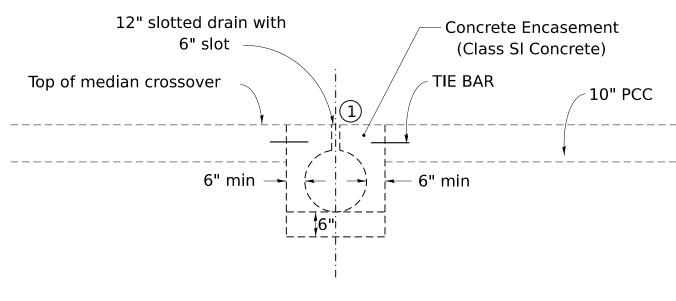
The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts, and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).



SECTION A-A

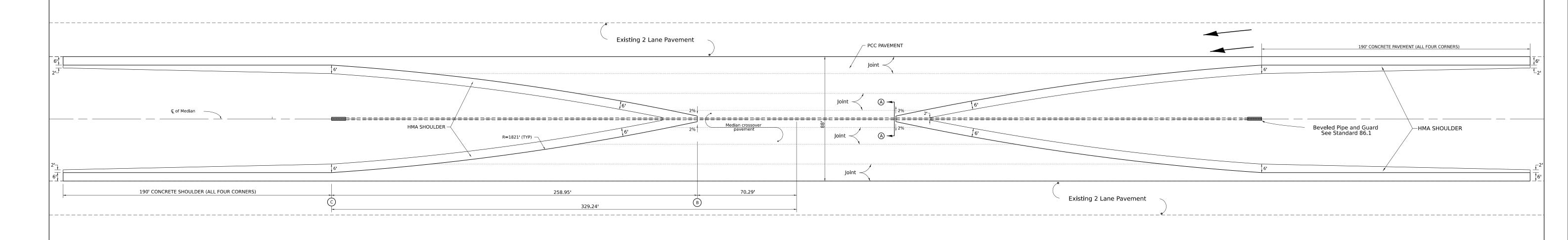
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



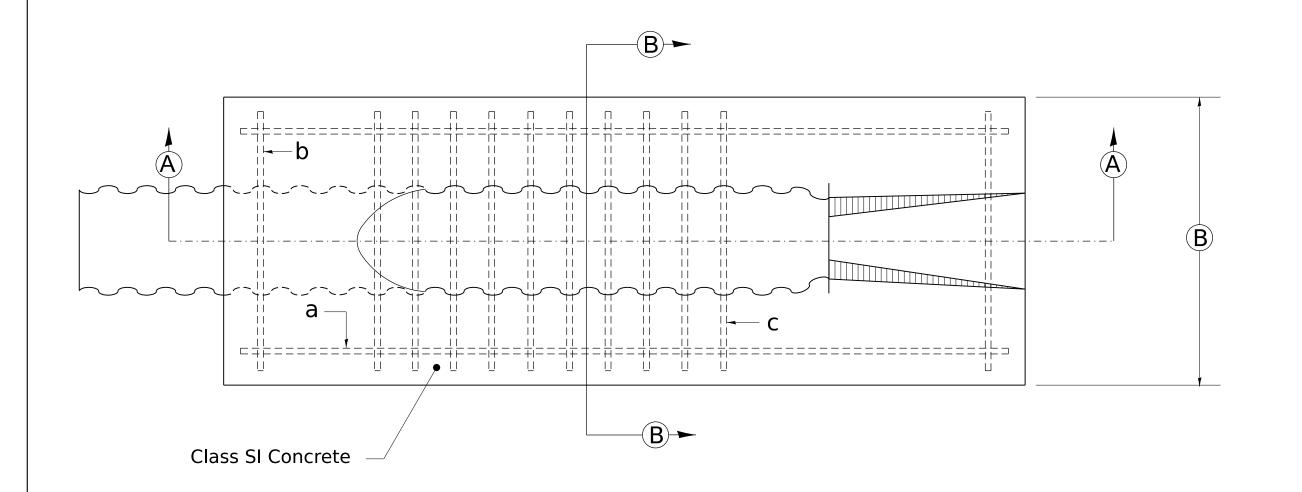
TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6'from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinaljoints shall be sawed at a max 12' width. All joints shall be sealed.

USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 2-26-19				F.A. RTE.	SECTION	COUNTY TOTAL SHEET	SHEE NO.
	DRAWN -	REVISED - 1-05-16	STATE OF ILLINOIS		REGION 2 / DISTRICT 2 STANDARD				
	CHECKED -	REVISED - 6-27-14	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.	
PLOT DATE = 4/17/2025	DATE -	REVISED - 8-27-13		SCALE:	SHEET 71 OF SHEETS STA. TO STA.		ILLINOIS FED. A	NID PROJECT	

BEVELED PIPE & GUARD DETAIL FOR MEDIAN CROSSOVER



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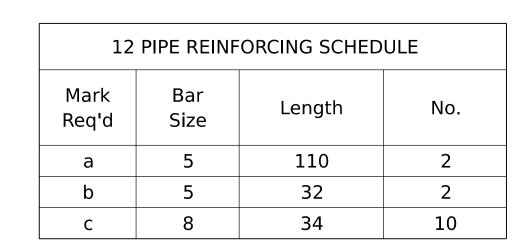
USER NAME = IDOT / DISTRICT 2

PLOT DATE = 4/17/2025

DESIGNED

CHECKED -

DRAWN



18 PIPE REINFORCING SCHEDULE										
Bar Size	Length	No.								
5	162	2								
5	38	2								
8	40	18								
	Bar Size 5	Bar Size Length 5 162 5 38								

6" Thick Class SI Concrete

GENERAL NOTES:

Details shown hereon are for the construction of beveled pipe and guard. Alternate designs, methods of construction or materials may be submitted to the Engineer for approval. All methods of construction and materials involved shall conform to current Standard Specifications.

Reinforcing steel used in construction of "Beveled Pipe and Guard" shall be deformed bars meeting the requirements of Article 1006.10 of the Standard Specifications. All steel bars shall be hot-dip galvanized in accordance with ASTM A 123 specifications.

Concrete used in construction of the beveled pipe and guard shall be Class "SI" Concrete.

The corrugated metal pipe shall be cut to fit the 1:8 foreslope. Slots shall be cut into the C.M.P. for placement of the 'b' and 'c' bars. After the foreslope has been placed, the 'b' and 'c' bars shall be fitted into the slots cut in the C.M.P. so they will be in proper position when the concrete collar is poured.

This work shall be paid for at the contract unit price per Each for "Beveled Pipe and Guard", as shown hereon and as directed by the Engineer.

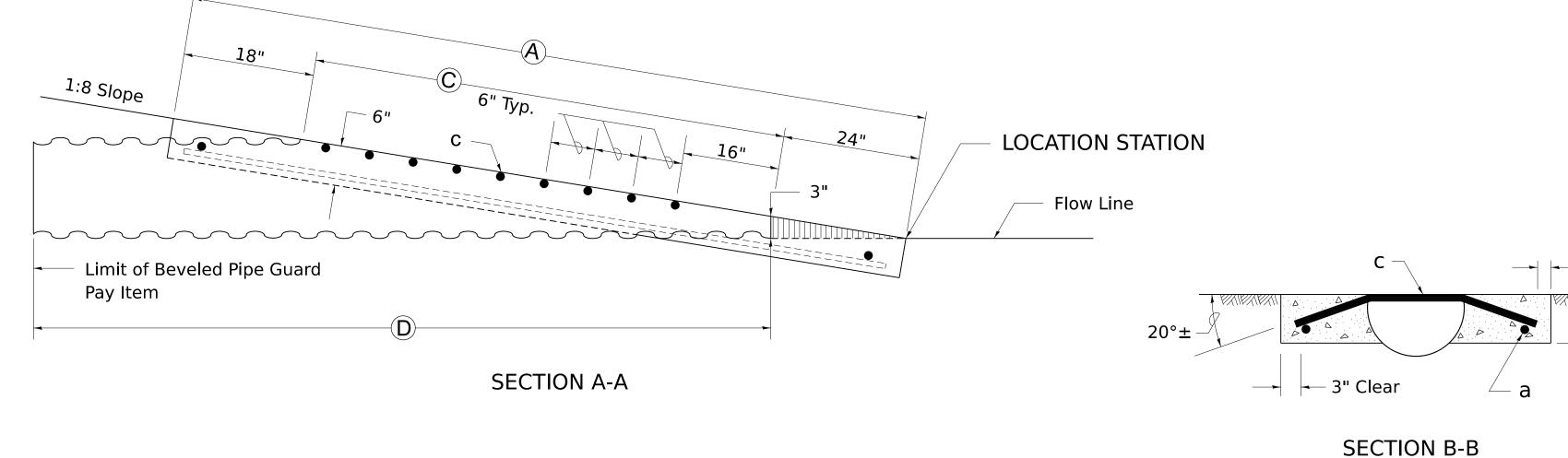


TABLE OF DIMENSIONS									
PIPE SIZE	A	В	С	D					
12	9'-6'	36	6'	10'					
18	13'-10"	42	10'-4"	14'-10"					

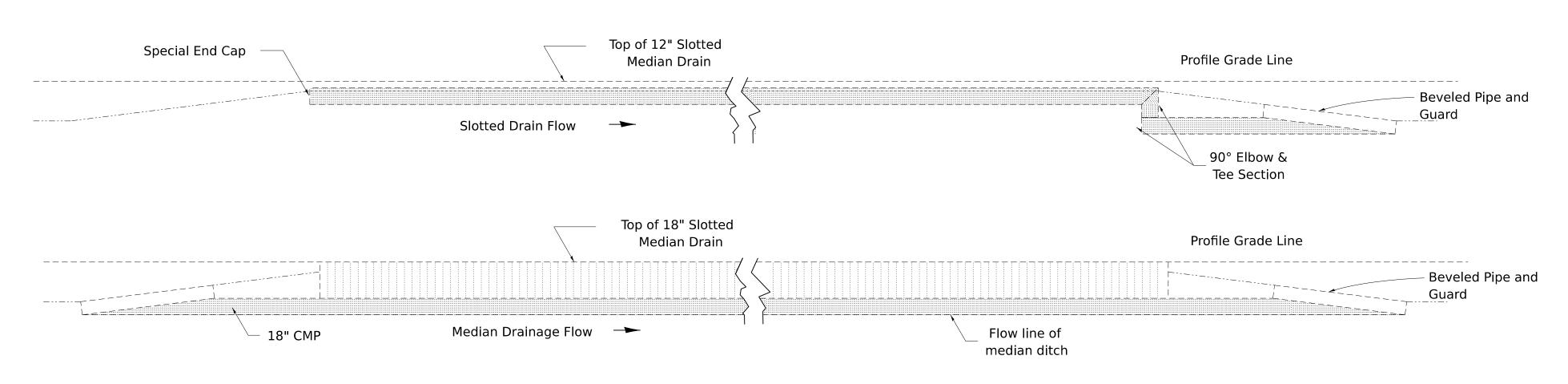
TYPICAL SECTION THRU CENTERLINE OF MEDIAN CROSSOVER

REVISED - 5-27-09

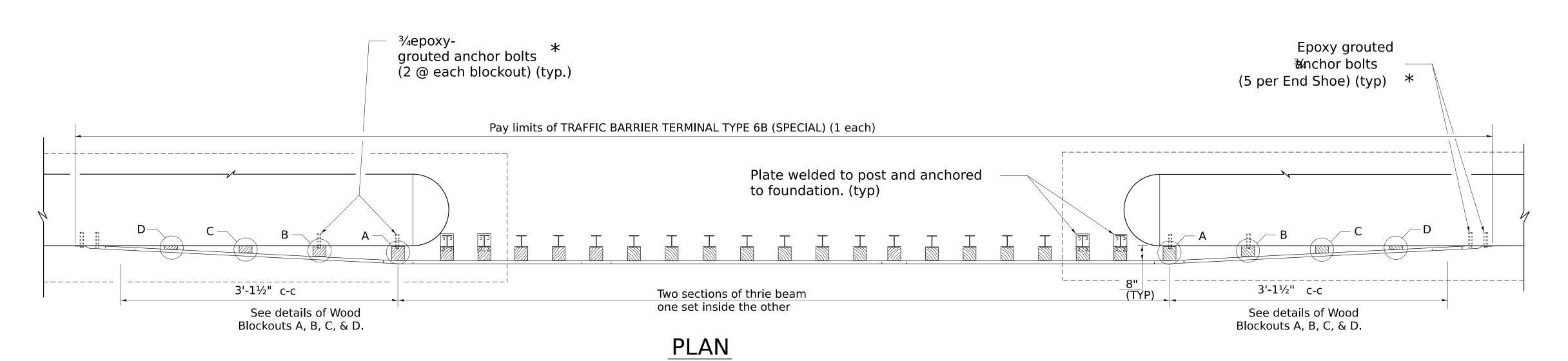
REVISED

REVISED

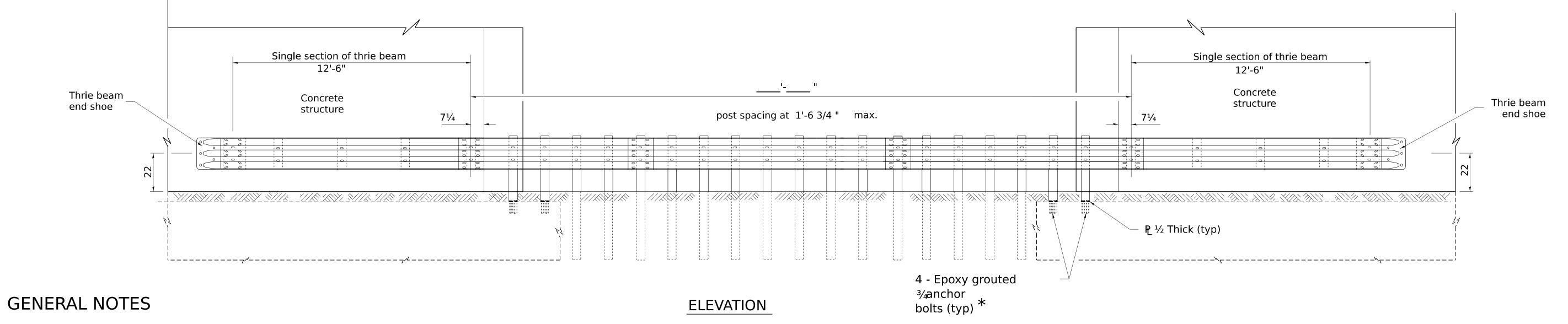
REVISED



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



* With standard washers. After tightening, cut the anchor bolts flush with the nuts and damage the nuts to prevent them from loosing.



This work shall be done according to Section 631 of the Standard Specifications and this detail.

DESIGNED -

CHECKED -

DRAWN

DATE

REVISED

REVISED

REVISED

REVISED -

10-18-11

See Standard 630001 for details of guardrail not shown.

Thrie beam rail shall be bolted to block-out at all posts.

Posts located above pier foundation shall have plate attached to post and anchored to foundation.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.

The Traffic barrier Terminal, Type 6B (Special) will be measured for payment, complete in place, in units of each.

This work shall be paid for at the contract unit price per each for TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL).

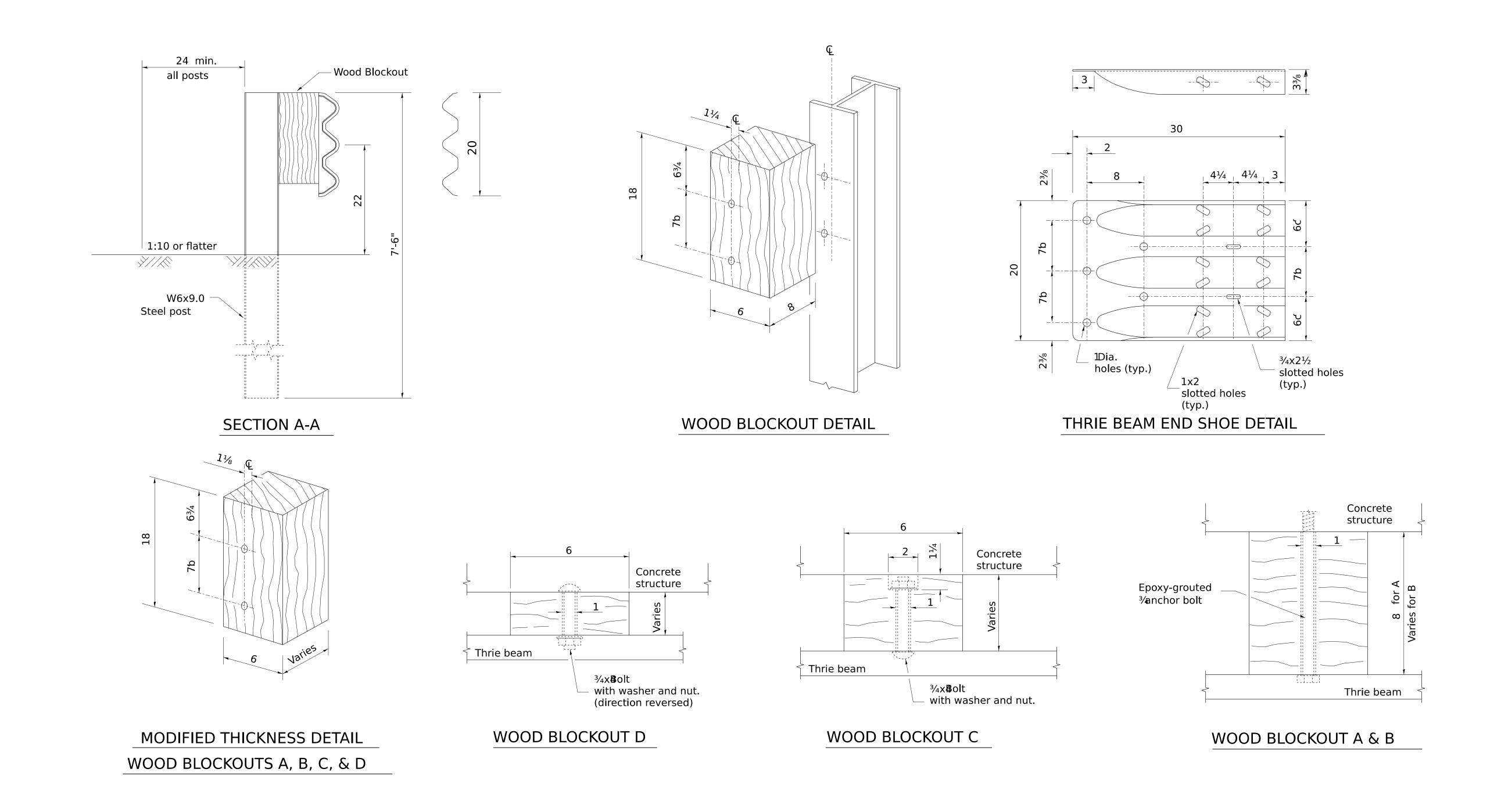
USER NAME = IDOT / DISTRICT 2

PLOT DATE = 4/17/2025

<u> 12</u>	
2 7 1	/ All around except
1/4	All around except for blockout side.
Full pen. f 45°	
1/4 G	
PLATE DETAIL	

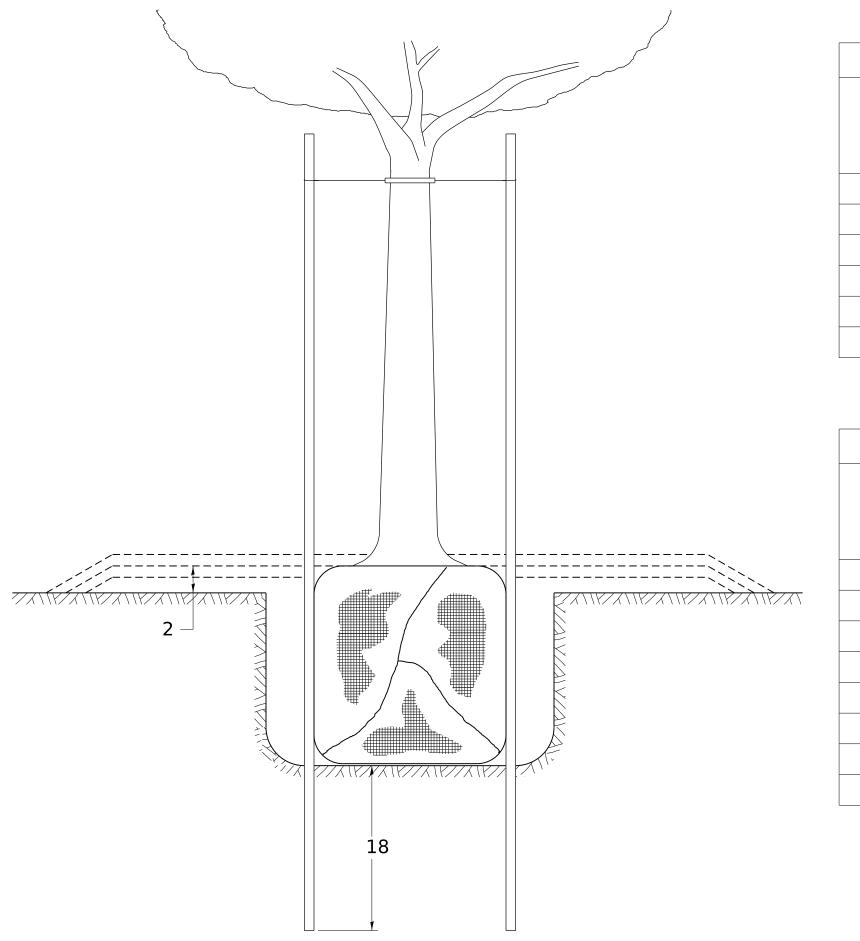
										TOTAL	OUEET
OTATE OF HILIDIO						RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
STATE OF ILLINOIS	REGION 2 / DISTRICT 2 STANDARD										
DEPARTMENT OF TRANSPORTATION		1							CONTRAC	T NO.	
	I SCALE:	SHEET 73	OF	SHEETS	ΔΤ2	TO STA		ILLINOIS FED	VID DDO IECT		

TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL)



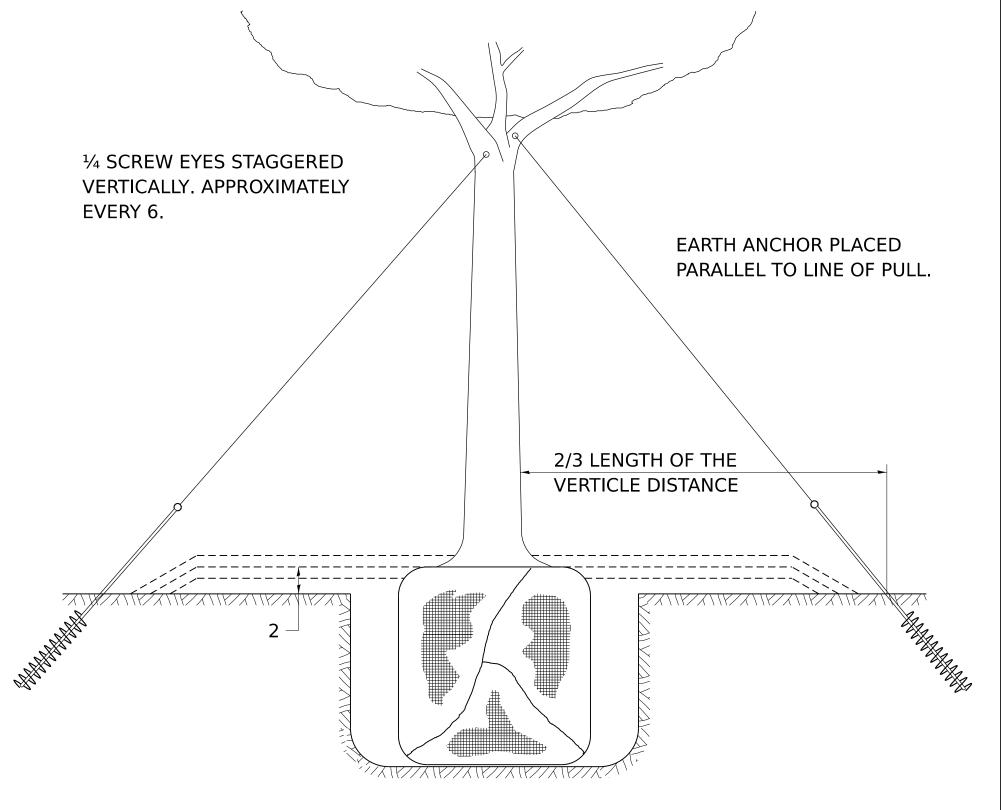
USER NAME = IDOT / DISTRICT 2	DESIGNED -	REVISED - 10-18-11					F.A.	SECTION	COUNTY TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS	REGION 2 / DISTRICT 2 STANDARD			IVIL.		SHELTS NO.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION						CONTRACT NO.
PLOT DATE = 4/17/2025	DATE -	REVISED -		SCALE:	SHEET 74 OF SHEETS STA.	TO STA.		ILLINOIS FEI	D. AID PROJECT

DETAILS OF PLANTING AND BRACING TREES

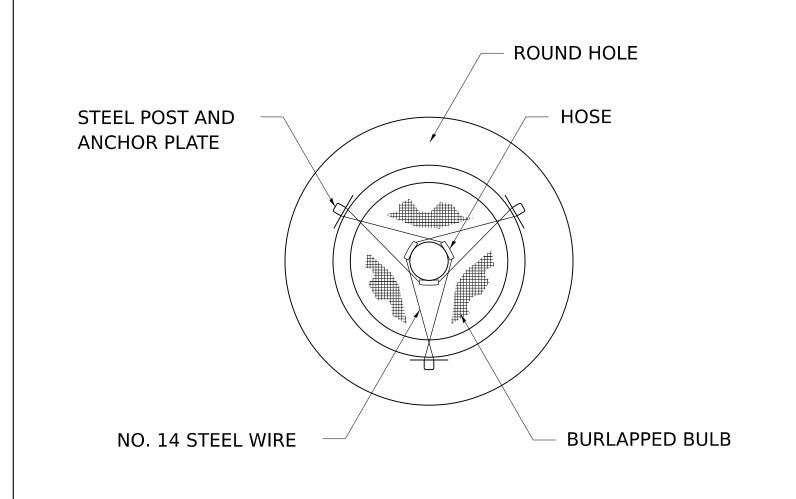


SMALL	А	В	С	D	Е	F
TREE SIZE	DIAMETER OF BALL OR ROOT SYS.	DEPTH OF HOLE EXCAVATION	WIDTH OF HOLE EXCAVATION	THICKNESS OF MULCH COVER	DEPTH OF BALL OR ROOT SYS.	VOLUME OF MULCH COVER CU. YDS.
5'-6'	16	10	30	4	12	0.54
5'-6' BB	16	10	30	4	12	0.54
6'-7' BB	18	12	30	4	14	0.54
7'-8' BB	20	11	30	4	13	0.54
8'-10' BB	24	14	36	4	16	0.61
10'-12' BB	26	15	36	4	17	0.61

LARGE	А	В	С	D	Е	F
	DIAMETER	DEPTH	WIDTH	THICKNESS	DEPTH	VOLUME OF
TREE SIZE	OF BALL OR	OF HOLE	OF HOLE	OF MULCH	OF BALL OR	MULCH COVE
	ROOT SYS.	EXCAVATION	EXCAVATION	COVER	ROOT SYS.	CU. YDS.
0-2	20	11	36	4	13	0.61
2-2½ BB	24	14	48	4	16	0.78
2½-3 BB	28	17	48	4	19	0.78
3-3½ BB	32	17	60	4	19	0.96
3½-4 BB	36	20	60	4	22	0.96
4-4½ BB	40	22	72	4	24	1.16
4½-5 BB	44	24	72	4	26	1.16
5-5½ BB	48	27	84	4	29	1.38
4½-5 BB	44	24	72	4	26	1.1

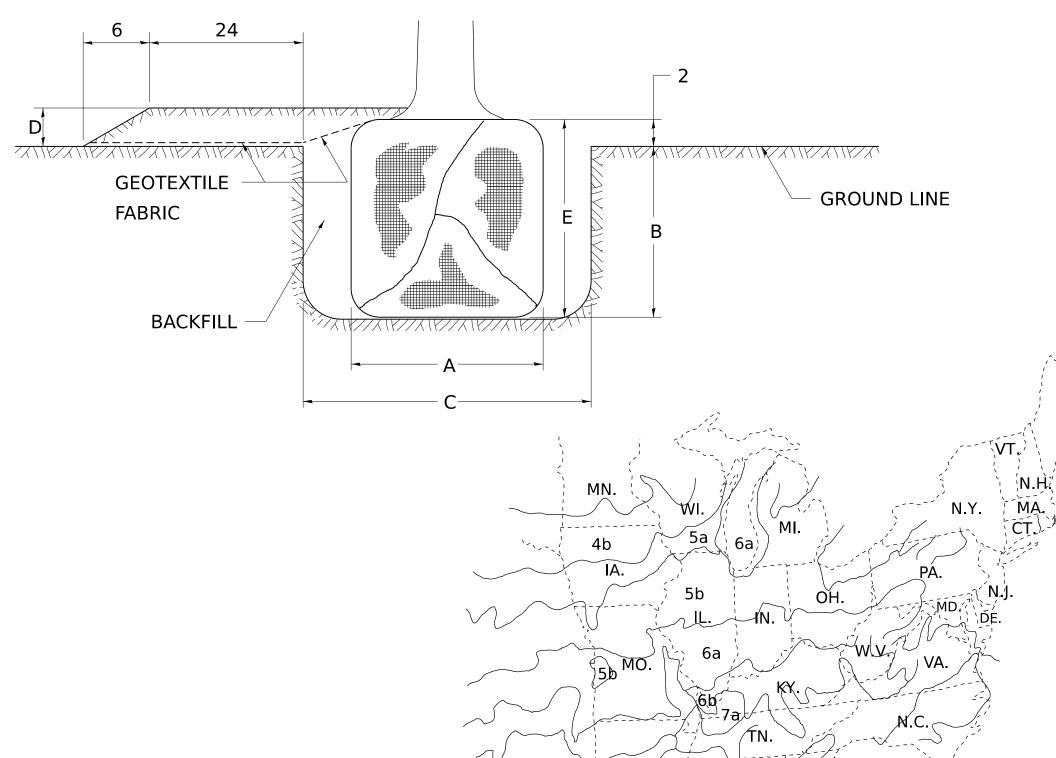


TREES SMALLER THAN 4½ IN DIAMETER



USER NAME = IDOT / DISTRICT 2

PLOT DATE = 4/17/2025



EQUAL DISTANCE

TREE TRUNK

SQUARE HOLE

ROUND HOLE

4 SCREW EYES

BURLAP BULB

NO. 12 STEEL WIRE

TREES OVER 4½ IN DIAMETER

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE PUBLICATION NO. 814

PLANT HARDINESS ZONÈ MAP

REVISED -

REVISED

REVISED

REVISED -

10-18-11

DESIGNED -

DRAWN -

CHECKED -

DATE -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REGION 2 / DISTRICT 2 STANDARD

COUNTY TOTAL SHEETS NOT SHEETS STANDARD

SCALE: SHEET 75 OF SHEETS STA. TO STA.

SECTION COUNTY TOTAL SHEETS SHEETS SHEETS NOT SHEETS SHEETS NOT SHEETS SHEETS