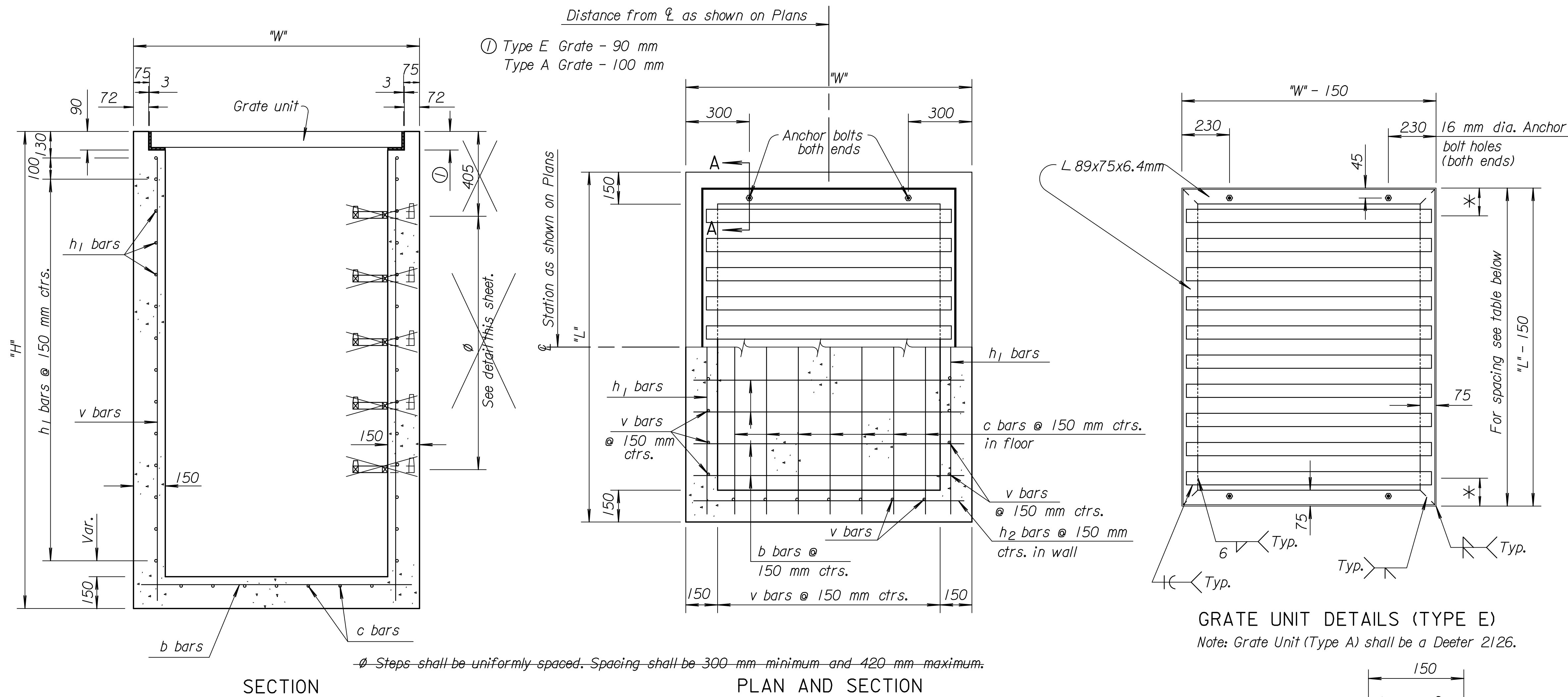


Note to Designer: For dimensions in any direction larger than those listed on this sheet, a structural design of both the inlet and grate should be performed.



GENERAL NOTES

Use Class A Concrete throughout. All exposed edges shall be finished with an edging tool.

At the contractor's option, Class A Concrete (AE) or mix used in concrete pavement may be used throughout.

In general, pipes will enter and leave the manhole at various positions. Where possible bend bars around pipes.

Floor of inlet shall be shaped as shown in various "Examples" on Reinforced Concrete Manhole Standard Drawing RD730 Sl. Concrete used for shaping shall be unreinforced Class "A" Concrete or concrete pavement mix. No addition in concrete quantities shall be made for shaping floor of inlets.

Manhole steps, where used, shall be placed to afford easy access to top of shaped invert.

No deductions in concrete quantities shall be made for pipe openings.

All bars are #13 @ 150 mm spacing and shall have a minimum clearance of 40 mm unless otherwise noted on the plans.

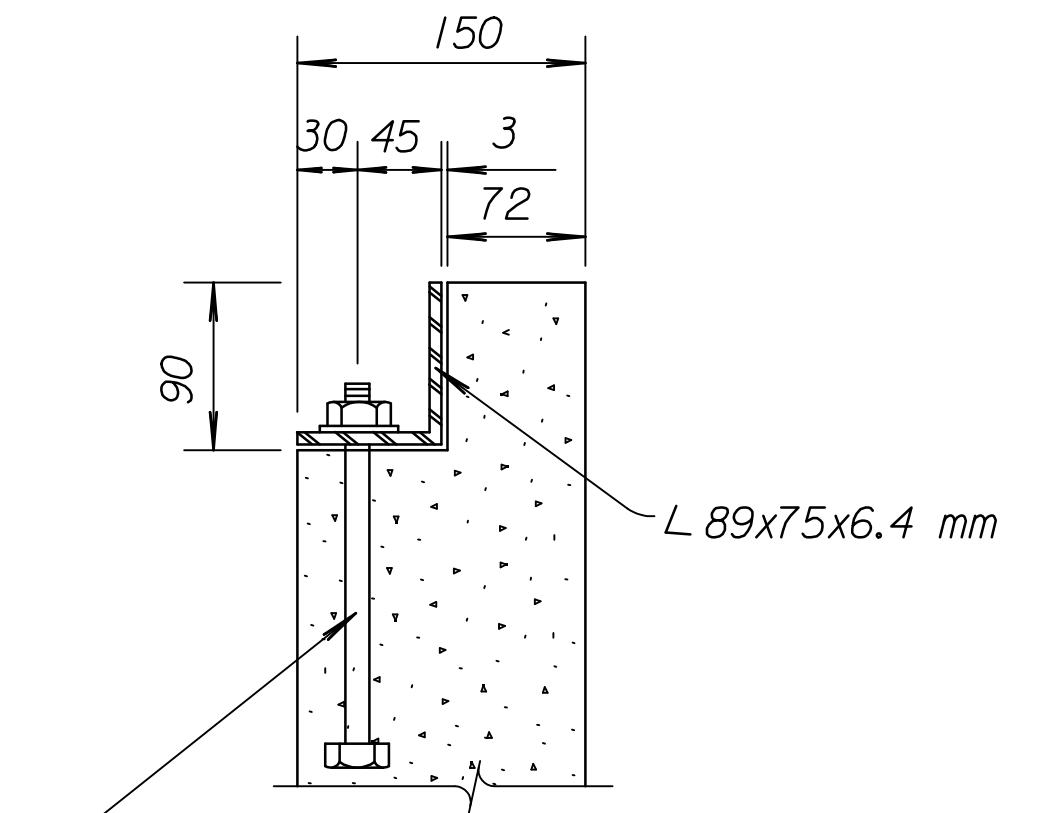
The top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions as directed by the Engineer.

Steps shall be installed on all storm sewer inlets when specified in the plans or when "H" is equal to or greater than 1.8 m. Steps shall comply with the KDOT Standard Specification.

The grate shall be fabricated from standard or commercial grade structural steel and black steel pipe. The unit shall be hot dipped galvanized after fabrication, in accordance with ASTM A123 except the mass of coating shall average not less than 0.61 kg/m² of actual surface and no individual test shall show less than 0.55 kg/m² of actual surface area.

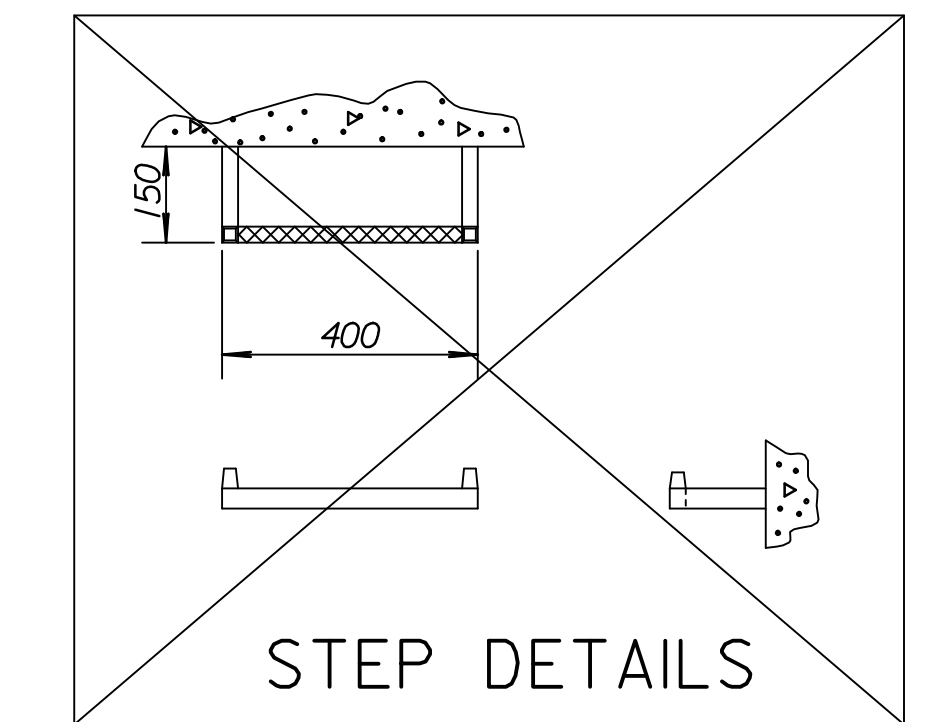
GRATE UNIT DETAILS (TYPE E)

Note: Grate Unit (Type A) shall be a Deeter 2126.



SECTION A-A

Note: Anchor bolts are subsidiary to the bid item "Inlet-Manhole, Special".



STEP DETAILS

Note: Steps shall not be installed in inlets and manholes on this project.

BILL OF MATERIALS FOR INLET-MANHOLE (SPECIAL)

"L" "W" "H" 1 200 x 1 200 x 1 220				"L" "W" "H" 1 200 x 1 200 x 0 910				"L" "W" "H" 1 500 x 1 500 x 1 070				"L" "W" "H" 1 500 x 1 500 x 1 520															
Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length
v	24	#13	1 050	v	24	#13	0 740	v	32	#13	0 900	v	32	#13	1 350	v				v				v			
c	6	#13	1 120	c	6	#13	1 120	c	8	#13	1 420	c	8	#13	1 420	c				c				c			
b	6	#13	1 120	b	6	#13	1 120	b	8	#13	1 420	b	8	#13	1 420	b				b				b			
h ₁	14	#13	1 120	h ₁	10	#13	1 120	h ₁	12	#13	1 420	h ₁	18	#13	1 420	h ₁				h ₁				h ₁			
h ₂	14	#13	1 120	h ₂	10	#13	1 120	h ₂	12	#13	1 420	h ₂	18	#13	1 420	h ₂				h ₂				h ₂			
Class "A" Conc.			0.9 m ³	Class "A" Conc.			0.7 m ³	Class "A" Conc.			1.1 m ³	Class "A" Conc.			1.4 m ³	Class "A" Conc.			m ³	Class "A" Conc.			m ³	Class "A" Conc.			m ³
Reinf. steel			70 kg	Reinf. steel			54 kg	Reinf. steel			85 kg	Reinf. steel			117 kg	Reinf. steel			kg	Reinf. steel			kg	Reinf. steel			kg
Struct. steel			95 kg	Struct. steel			95 kg	Struct. steel			146 kg	Struct. steel			146 kg	Struct. steel			kg	Struct. steel			kg	Struct. steel			kg
Class III Excav.			3.9 m ³	Class III Excav.			3.0 m ³	Class III Excav.			4.7 m ³	Class III Excav.			6.7 m ³	Class III Excav.			m ³	Class III Excav.			m ³	Class III Excav.			m ³

BILL OF MATERIALS FOR INLET-MANHOLE (SPECIAL)

"L" "W" "H" 1 200 x 1 200 x 1 220				"L" "W" "H" 1 400 x 1 400 x 1 200				"L" "W" "H" 1 400 x 1 400 x 1 400				"L" "W" "H" 1 200 x 1 200 x 0 910				"L" "W" "H" 1 200 x 1 200 x 1 070											
Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length	Bar	No.	Size	Length
v	24	#13	1 050	v	28	#13	1 030	v	28	#13	1 230	v	24	#13	0 740	v	24	#13	0 900	v				v			
c	6	#13	1 120	c	7	#13	1 320	c	7	#13	1 320	c	6	#13	1 120	c	6	#13	1 120	c				c			
b	6	#13	1 120	b	7	#13	1 320	b	7	#13	1 320	b	6	#13	1 120	b	6	#13	1 120	b				b			
h ₁	14	#13	1 120	h ₁	14	#13	1 320	h ₁	16	#13	1 320	h ₁	10	#13	1 120	h ₁	12	#13	1 120	h ₁				h ₁			
h ₂	14	#13	1 120	h ₂	14	#13	1 320	h ₂	16	#13	1 320	h ₂	10	#13	1 120	h ₂	12	#13	1 120	h ₂				h ₂			
Class "A" Conc.			0.9 m ³	Class "A" Conc.			1.0 m ³	Class "A" Conc.			1.2 m ³	Class "A" Conc.			0.7 m ³	Class "A" Conc.			0.8 m ³	Class "A" Conc.			m ³	Class "A" Conc.			m ³
Reinf. steel			70 kg	Reinf. steel			84 kg	Reinf. steel			95 kg	Reinf. steel			54 kg	Reinf. steel			62 kg	Reinf. steel			kg	Reinf. steel			kg
Struct. steel			X kg	Struct. steel			124 kg	Struct. steel			124 kg	Struct. steel			X kg	Struct. steel			X kg	Struct. steel			kg	Struct. steel			kg
Class III Excav.			3.9 m ³	Class III Excav.			4.8 m ³	Class III Excav.			5.6 m ³	Class III Excav.			3.0 m ³	Class III Excav.			3.5 m ³	Class III Excav.			m ³	Class III Excav.			m ³

* A Deeter 2126 grate unit to be installed.

PIPE DIMENSIONS AND SPACING

L x W	No. of Bars	Dia. x Length	Spacing	*
2 200x1 400	14	64 Ø x 1 220	140	115
1 600x1 400	9	64 Ø x 1 220	150	125
1 400x1 400	8	64 Ø x 1 220	140	135
1 200x1 200	7	64 Ø x 1 020	140	105

RECORD DRAWING

NO.	DATE	REVISIONS	BY	APP'D
6	12-05-00	Added Note to Designer	R.J.S.	J.O.B.
5	10-03-00	Revised bolt callouts	R.J.S.	J.O.B.
4	7-12-00	Revised bar quantities	R.J.S.	J.O.B.
3	12-15-97	Revised step spacing	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

**INLET - MANHOLE,
SPECIAL**

RD732-SI

DESIGNED	12-21-00	APP'D. James O. Brewer
DESIGN CK.	DETAILED	QUANTITIES
	DETAIL CK.	QUAN. CK.
		TRACED
		TRACE CK.

Drawn By: gdr
Plotted: 8-13-2001
File: I:\1997\9362\As-Builts\dgrs\sh 141-KDOT_Srd-Rdp732sl.dgn
Last Rev: 8-17-01 By: gdr