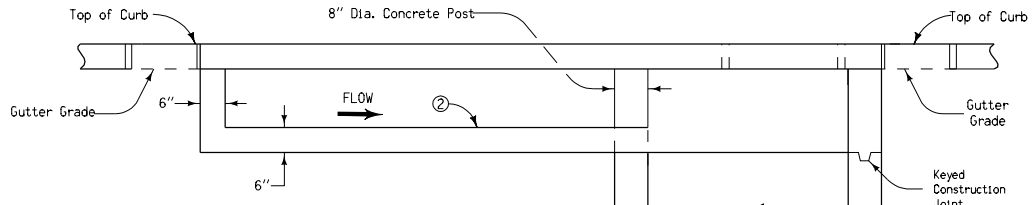
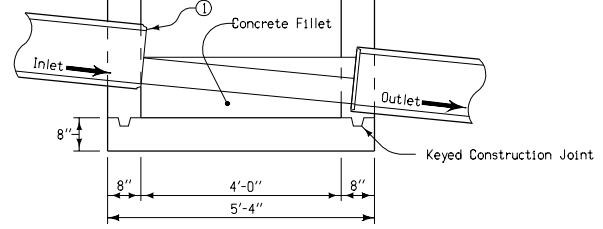


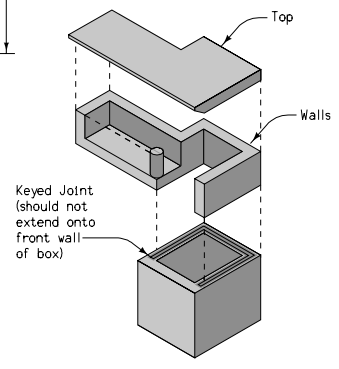
PLAN VIEW



SECTION A-A
(Typical Extension Unit)



SECTION B-B
(Typical Intake Well)



ISOMETRIC VIEW
INTAKE WELL, WALLS AND TOP

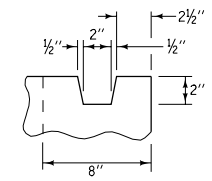
TABLE OF DIMENSIONS					
(LO)	Length of Curb Opening	12'-0"	14'-0"	16'-0"	18'-0"
(EL)	Extension Length	7'-10"	9'-10"	11'-10"	13'-10"
(BL)	Minimum Boxout Length	16'-2"	18'-2"	20'-2"	22'-2"

- ① Inlet and outlet pipes to be trimmed flush with inside wall.
- ② Slope same as gutter. Drain to well.
- ③ Other lengths of opening may be constructed by varying the length of the extension and the rebar.
- ④ Includes 2" for 'E' Joints.

Extension unit may be used on either or both sides of intake. Details are similar when extension unit is on the opposite side.

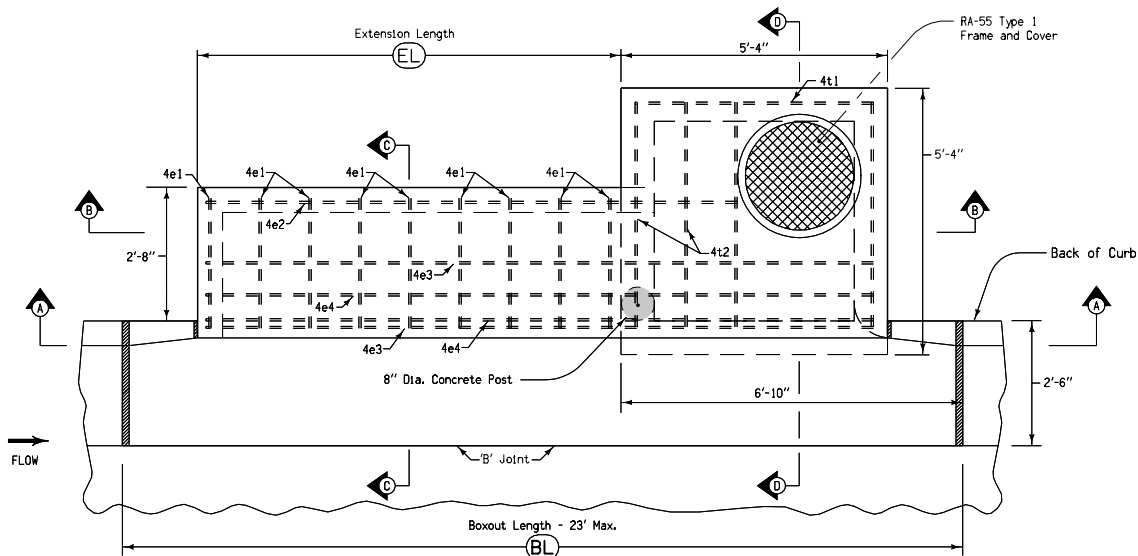
Contract Item:
Intake, RA-70

For joint details, see Standard Road Plans RH-50, RH-51, and RH-52.

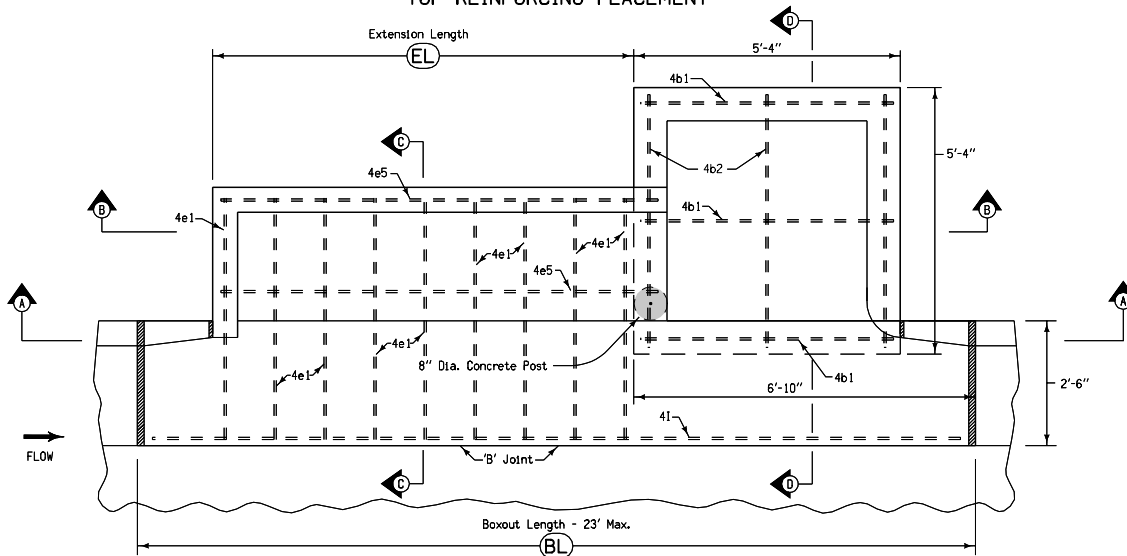


KEYED CONSTRUCTION
JOINT DETAIL

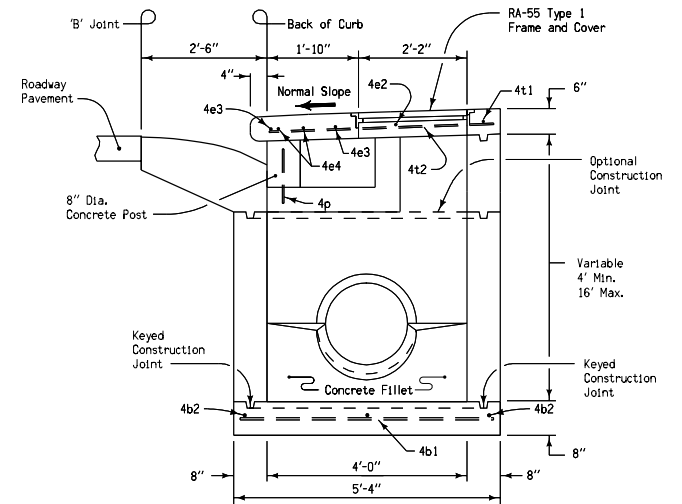
	REVISION
	NEW 10-17-06
STANDARD ROAD PLAN	RA-70
REVISIONS: Replaces paren-number standards with one multi-page standard.	SHEET 1 of 3
<i>Deanna Mayfield</i> APPROVED BY DESIGN METHODS ENGINEER	
CURB INTAKE WITH EXTENDED OPENING	



PLAN VIEW
TOP REINFORCING PLACEMENT



PLAN VIEW
BOTTOM REINFORCING PLACEMENT



SECTION D-D

REINFORCING BAR LIST					
Intake Well					
MARK	LOCATION	NO.	LENGTH	WEIGHT	SPACING
4b1	Base	3	5'-0"	10.0	2'-4"
4b2	Base	3	5'-0"	10.0	2'-4"
4t1	Top	1	5'-0"	3.3	12"
4t2	Top	4	4'-6"	12.0	See Detail
4p	Post	1	13"	0.7	
Total				36 lbs.	

Iowa Department of Transportation

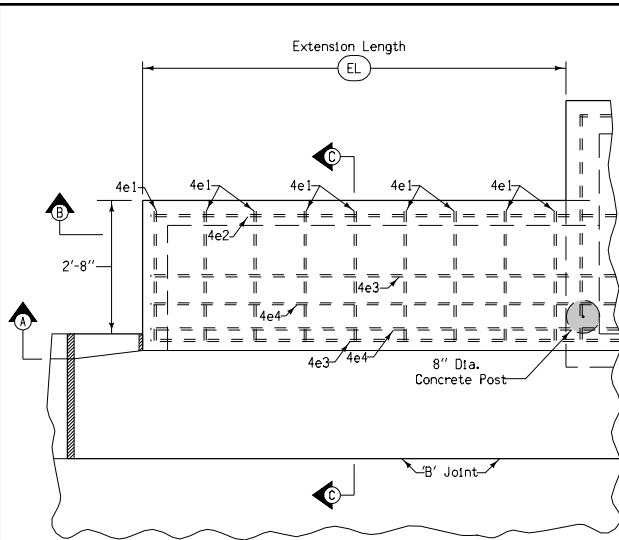
STANDARD ROAD PLAN

REVISION
NEW 10-17-06
RA-70
SHEET 2 of 3

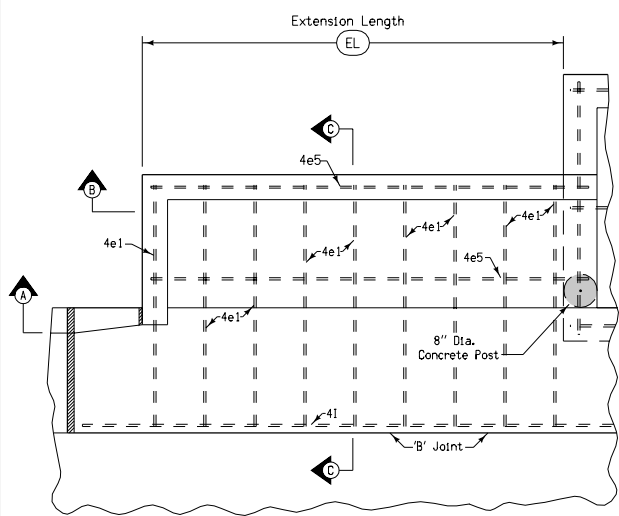
REVISIONS: Replaces paren-number standards with one multi-page standard.

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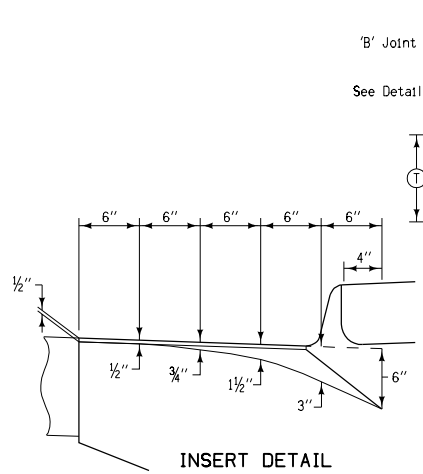
CURB INTAKE WITH
EXTENDED OPENING



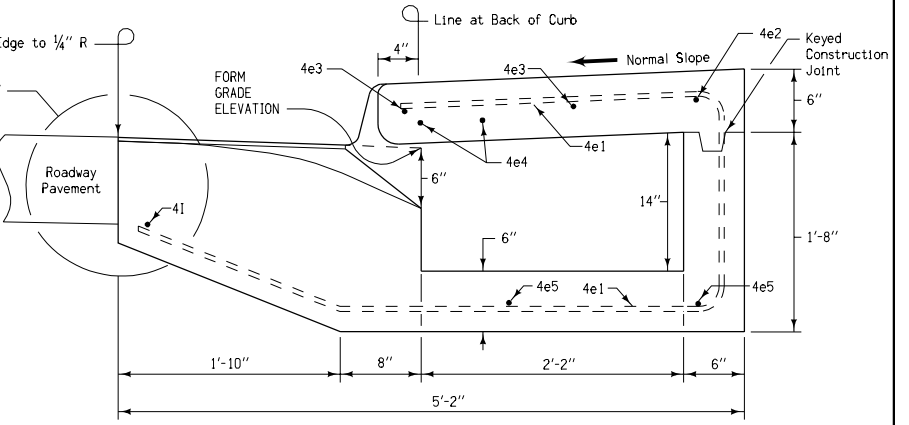
PLAN VIEW
TOP OF EXTENSION REINFORCING PLACEMENT



PLAN VIEW
BOTTOM OF EXTENSION REINFORCING PLACEMENT



INSERT DETAIL



SECTION C-C

REINFORCING BAR LIST (LO) = 12'

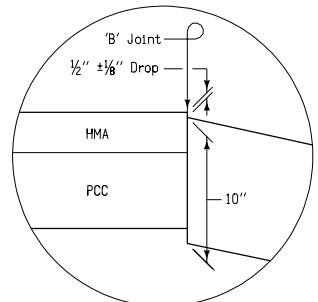
MARK	SIZE	LOCATION	NO.	LENGTH	MASS	SPACING
4e1	4	Top/Base	9	9'-5 1/2"	56.9	12"
4e2	4	Top	1	10'-0"	6.7	
4e3	4	Top	2	12'-9"	17.0	15 1/2"
4e4	4	Top	2	12'-9"	17.0	6"
4e5	4	Base	2	8'-2"	10.9	22"
41*	4	Insert	1	15'-10"	10.6	
* With 16'-6" Boxout.				Total	119.1 lbs.	

REINFORCING BAR LIST (LO) = 14'

MARK	SIZE	LOCATION	NO.	LENGTH	MASS	SPACING
4e1	4	Top/Base	11	9'-5 1/2"	69.5	12"
4e2	4	Top	1	12'-0"	8.0	
4e3	4	Top	2	14'-9"	19.7	15 1/2"
4e4	4	Top	2	14'-9"	19.7	6"
4e5	4	Base	2	10'-2"	13.6	22"
41*	4	Insert	1	17'-10"	11.9	
* With 18'-6" Boxout.				Total	142.4 lbs.	

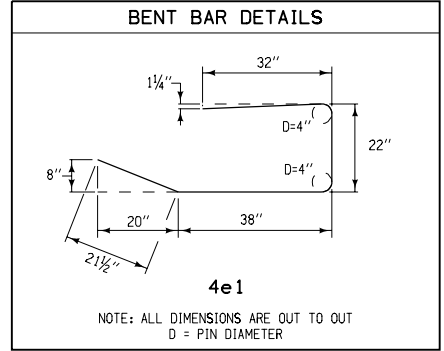
REINFORCING BAR LIST (LO) = 16'

MARK	SIZE	LOCATION	NO.	LENGTH	MASS	SPACING
4e1	4	Top/Base	13	9'-5 1/2"	82.1	12"
4e2	4	Top	1	14'-0"	9.3	
4e3	4	Top	2	16'-9"	22.4	15 1/2"
4e4	4	Top	2	16'-9"	22.4	6"
4e5	4	Base	2	12'-2"	16.2	22"
41*	4	Insert	1	19'-10"	13.2	
* With 20'-6" Boxout.				Total	165.6 lbs.	



DETAIL 'A'

Use when adjacent pavement is HMA or composite.



4e1

NOTE: ALL DIMENSIONS ARE OUT TO OUT
D = PIN DIAMETER

REINFORCING BAR LIST (LO) = 18'

MARK	SIZE	LOCATION	NO.	LENGTH	MASS	SPACING
4e1	4	Top/Base	15	9'-5 1/2"	94.8	12"
4e2	4	Top	1	16'-0"	10.7	
4e3	4	Top	2	18'-9"	25	15 1/2"
4e4	4	Top	2	18'-9"	25	6"
4e5	4	Base	2	14'-2"	18.9	22"
41*	4	Insert	1	21'-10"	14.6	
* With 22'-6" Boxout.				Total	189.0 lbs.	

Iowa Department of Transportation

REVISION
NEW 10-17-06

STANDARD ROAD PLAN

RA-70
SHEET 3 of 3

REVISIONS: Replaces paren-number standards with one multi-page standard.

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CURB INTAKE WITH EXTENDED OPENING