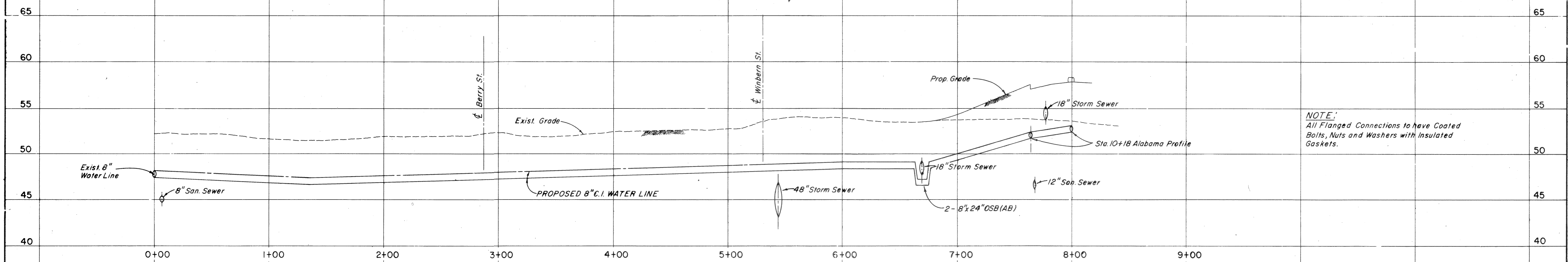


8" WATER LINE PROFILE - ALABAMA ST.



8" WATER LINE PROFILE - CHENEVERT ST.

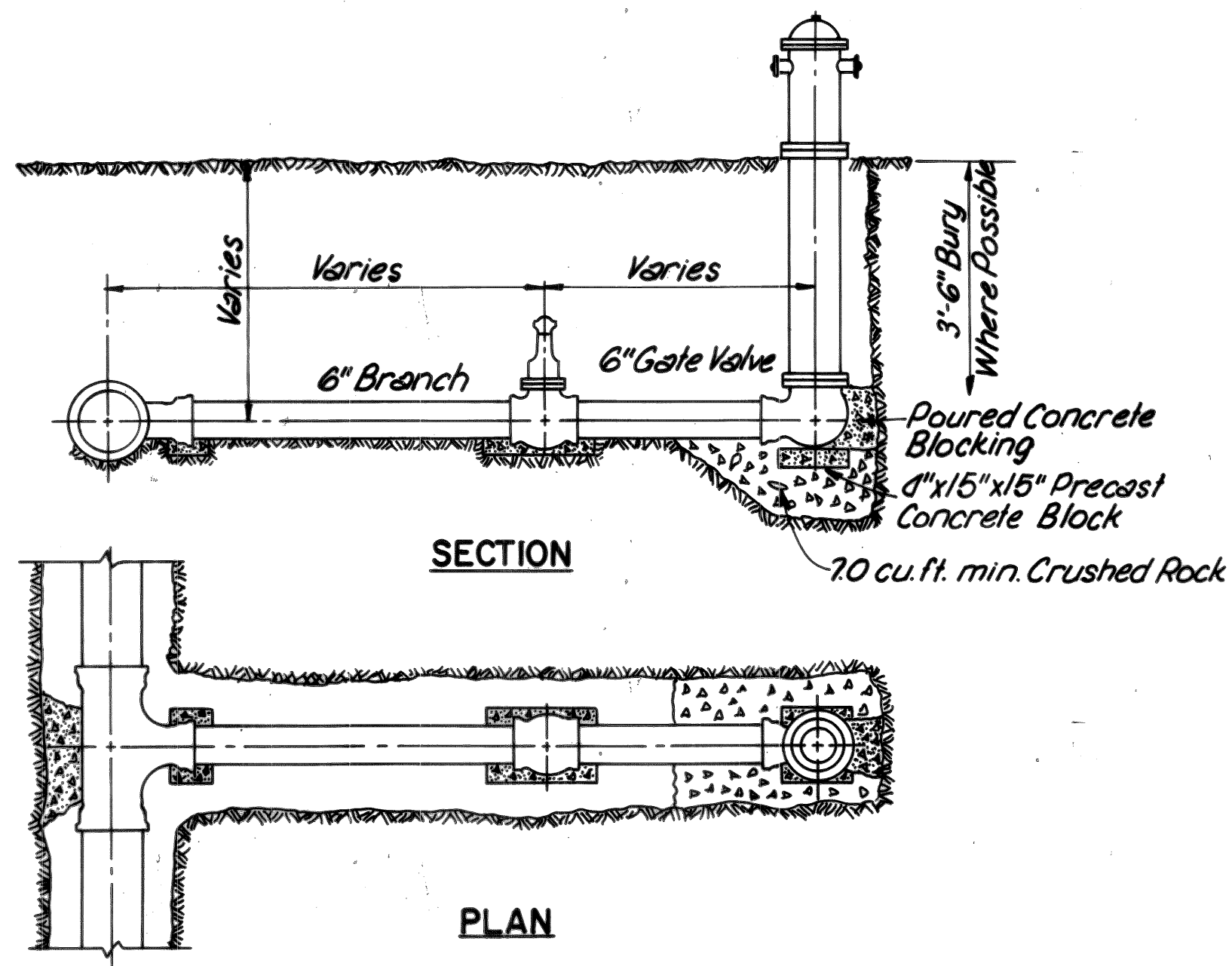
NOTE:
All Flanged Connections to have Coated Bolts, Nuts and Washers with Insulated Gaskets.

LOCKWOOD, ANDREWS & NEWNAM, INC.
CONSULTING ENGINEERS
APPROVED R.H.P. DWG. NO. D-13722 JOB NO. 69-1-235-300

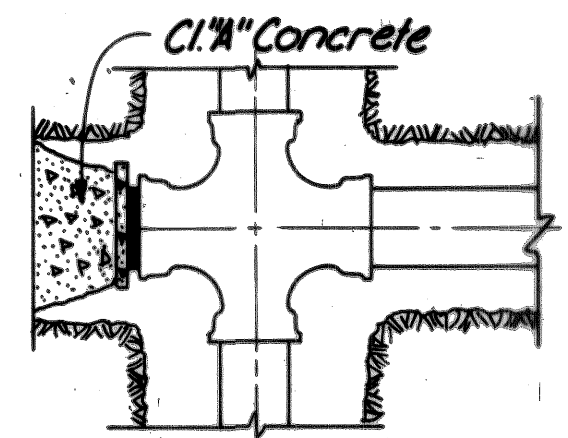
CITY OF HOUSTON
PUBLIC WORKS DEPT. WATER DIVISION
PROPOSED WATER MAINS APPROVED FOR CONSTRUCTION
BY THE TEXAS HIGHWAY DEPARTMENT
BY: *E. Blase*
DIRECTOR, PUBLIC WORKS DEPT.
R. D. Baker
ASSISTANT DIRECTOR, WATER DIV.
QUALITY WATER ENGINEER
A. W. Kupp DESIGN SERVICE SUPERVISOR
H. J. Miller MANAGER, ENGINEERING SECT. LIAISON CHIEF

TEXAS HIGHWAY DEPARTMENT
HOUSTON URBAN PROJECT
U.S. 59
WATER MAIN PROFILE
SHEET 3 OF 4

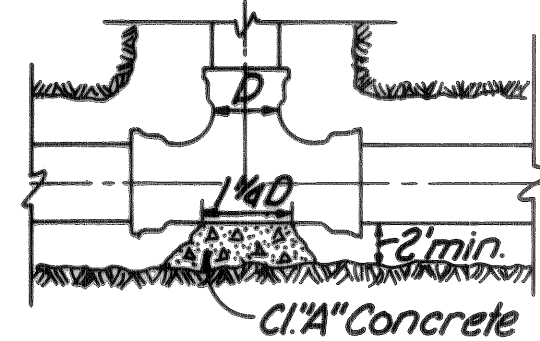
DR.	DRAWING	DATE	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET I.C.
CR. DR.			6	TEXAS	U 514 (65)	156
DW.						
CK. DW.						
TR.						
CK. TR.			12	Harris	27 13 52	U.S. 59



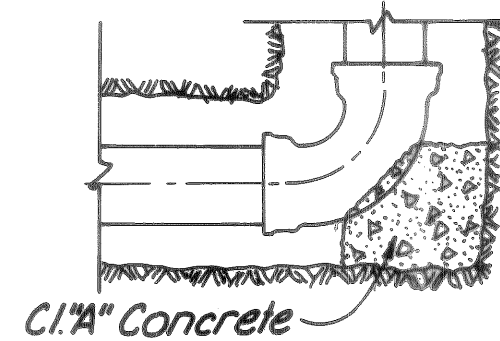
FIRE HYDRANT DETAIL



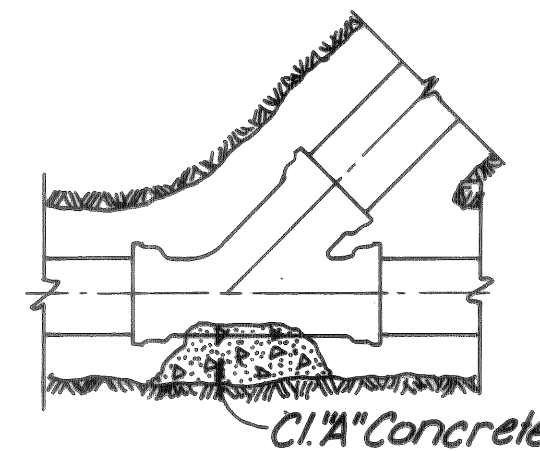
CAST IRON ALL BELL CROSS OR END



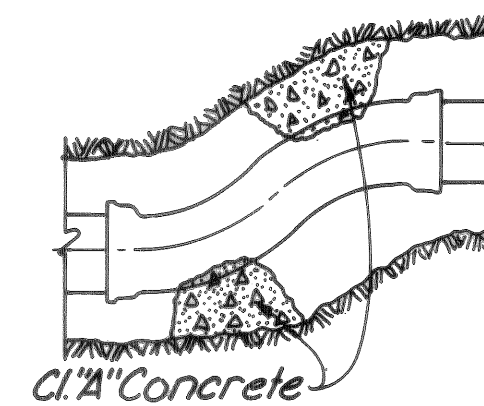
CAST IRON ALL BELL TEE



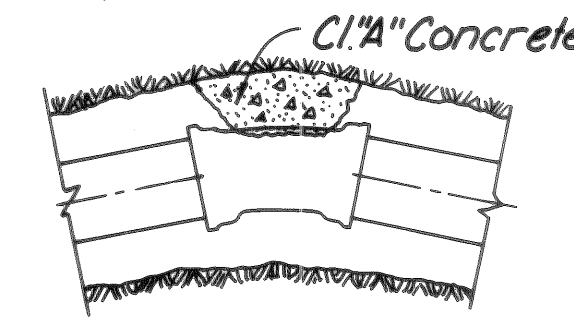
CAST IRON ALL BELL ELBOW



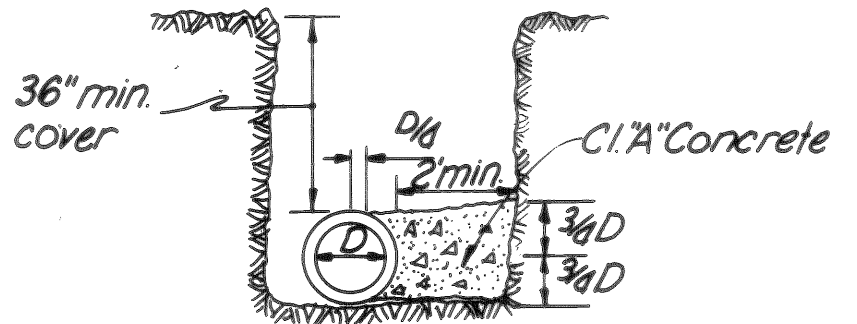
CAST IRON ALL BELL LATERAL



CAST IRON ALL BELL OFFSET

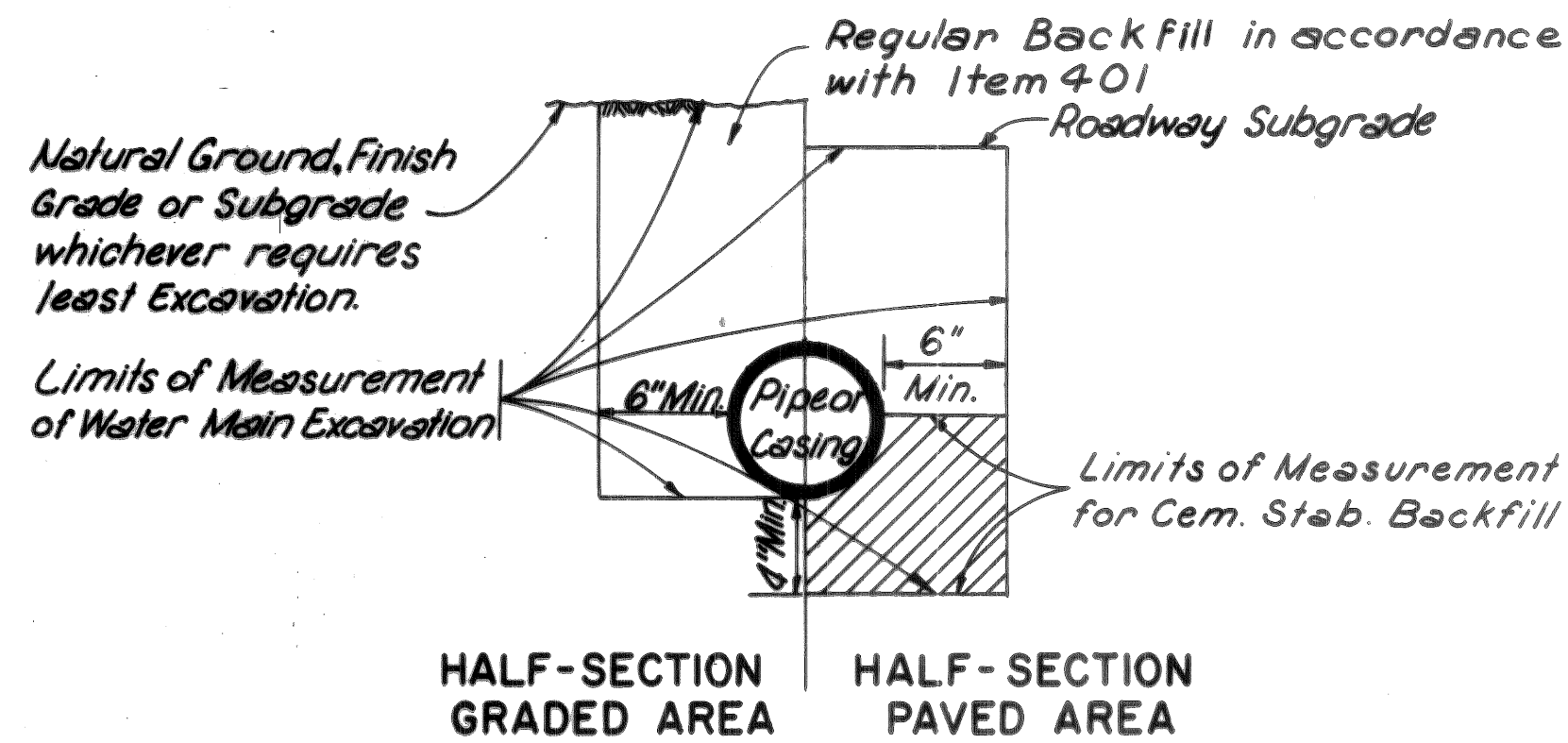


CAST IRON ALL BELL BEND



TYPICAL THRUST BACKING SECTION

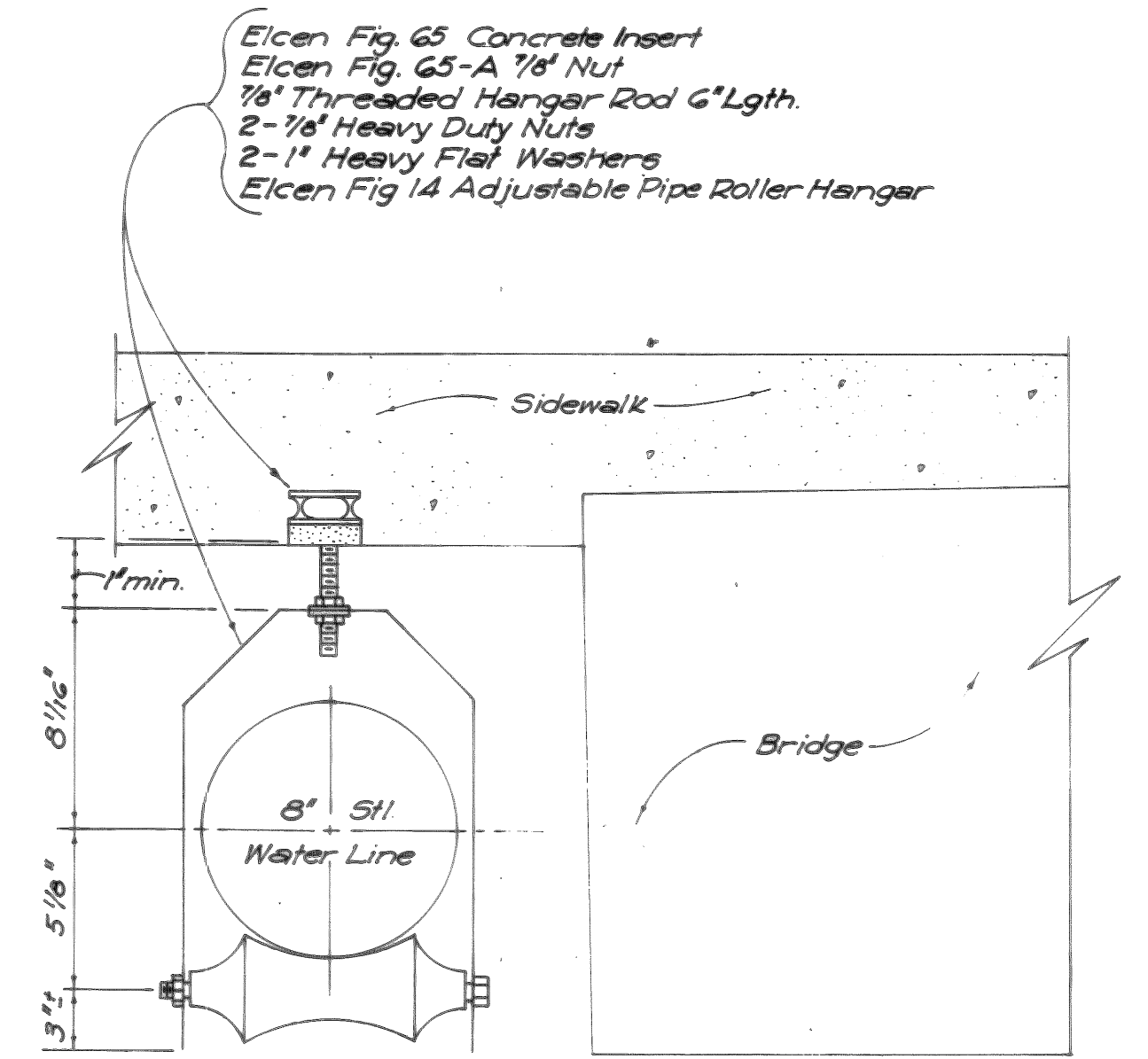
THRUST BACKING DETAILS



EXCAVATION & BACKFILL DIAGRAM

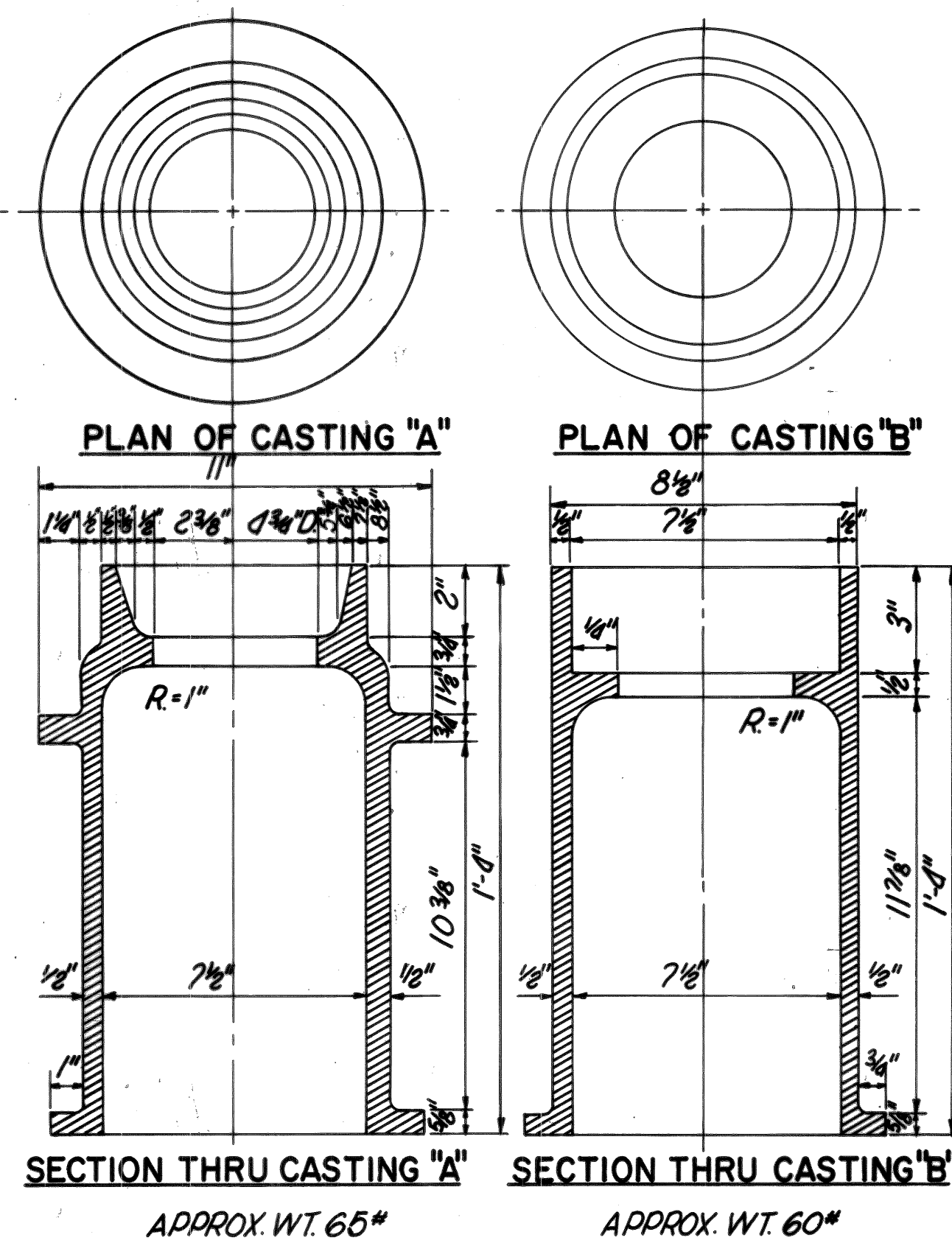
Cement Stabilized Backfill Shall be extended 3' beyond edge of pavement including shoulders.

Pipe sizes 2" and smaller shall be backfilled in accordance with Item 401.

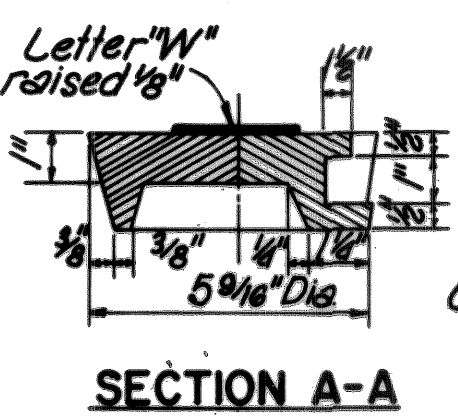
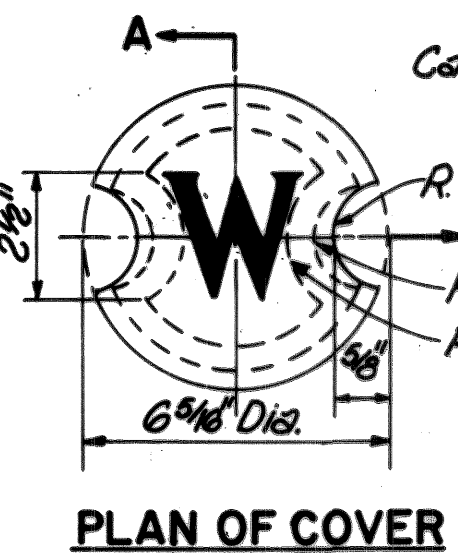


TYPICAL HANGER DETAIL FOR BRIDGES

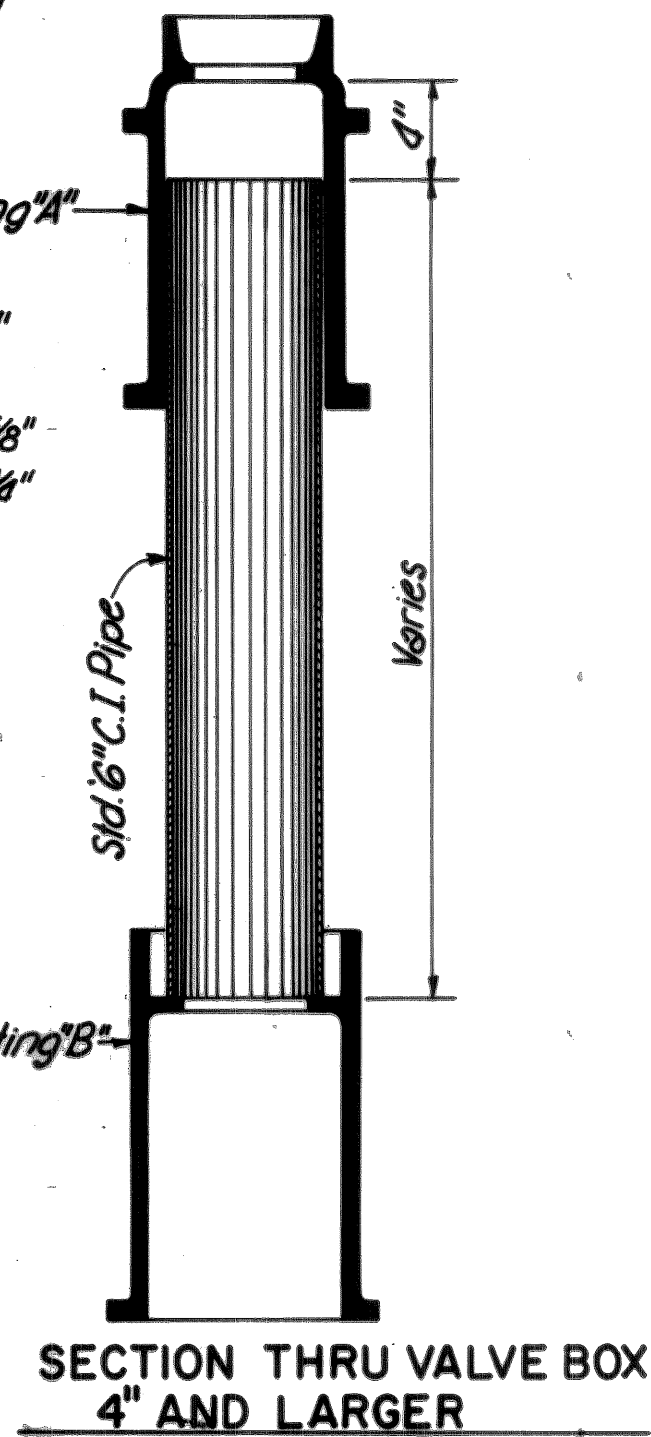
NOTE: See Bridge Plans for Reinforcing Bars Around Concrete Insert & Spacing of Insert (12" Centers)



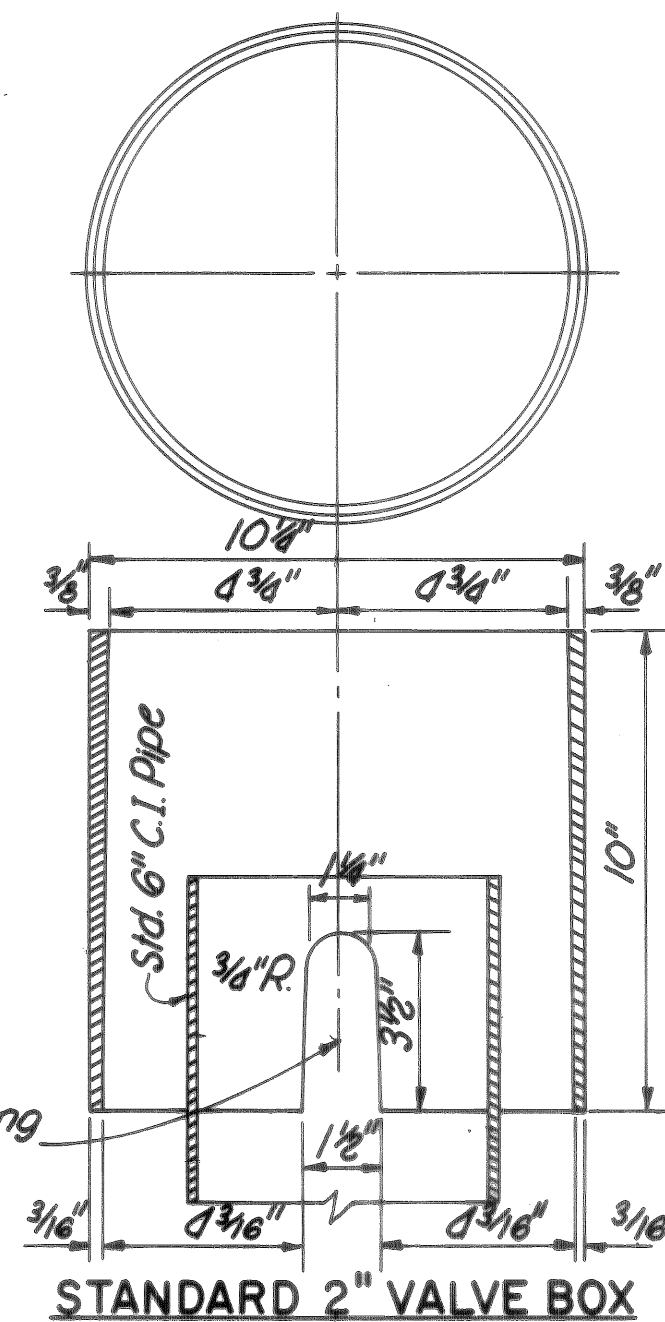
Note: Material - Gray Cast Iron
Paint - Dip in coal tar pitch varnish.



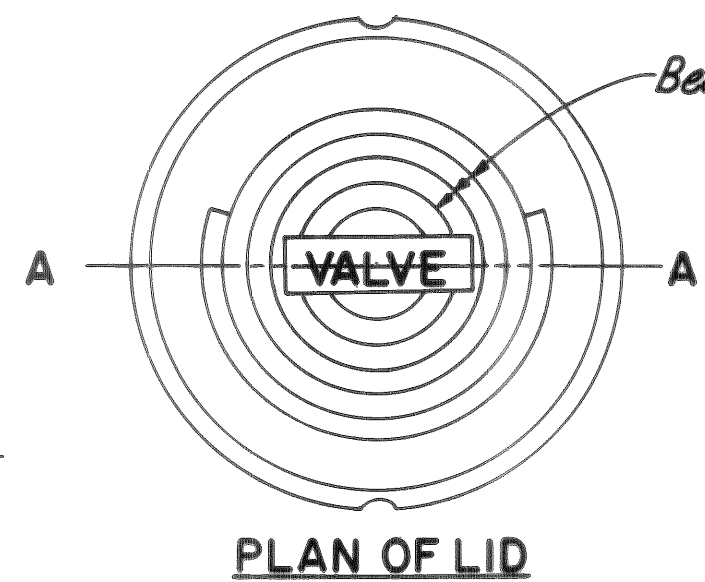
(Required only when 6" C.I. Pipe will not enclose the stuffing box section of the valve.)



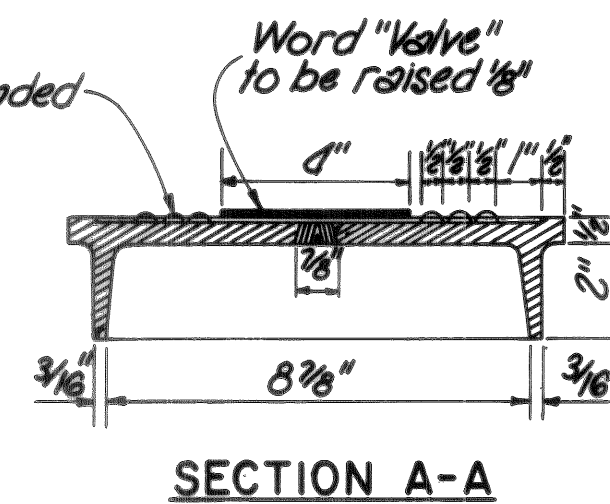
This opening on 2 Sides



STANDARD 2" VALVE BOX



PLAN OF LID



SECTION A-A

8" MODIFICATIONS AT ALABAMA AND U.S.HWY.59
CONTROL # 552

CITY OF HOUSTON
PUBLIC WORKS DEPT. WATER DIVISION
PROPOSED WATER MAINS APPROVED FOR CONSTRUCTION BY THE TEXAS HIGHWAY DEPARTMENT

BY: *[Signature]*
DIRECTOR, PUBLIC WORKS DEPT.

ASSISTANT DIRECTOR, WATER DIV.
[Signature]
QUALITY WATER ENGINEER
[Signature]
DESIGN SERVICE SUPERVISOR

[Signature]
MANAGER, ENGINEERING SECT.
[Signature]
LIASON CHIEF

LOCKWOOD, ANDREWS & NEWNAM, INC.
CONSULTING ENGINEERS

APPROVED R.H.P. DWG. NO. D-13723 JOB NO. 69-1-235-302

Pipe Dia.	Tee, Cross, or End	1/4 Bend	1/8 Bend	1/32 Bend
6"	1.00	1.00	0.75	0.60
8"	2.00	2.00	1.30	0.70
12"	5.00	5.00	4.00	1.50

Required Thrust Backing Area in Square Feet

TEXAS HIGHWAY DEPARTMENT
HOUSTON URBAN EXPRESSWAYS

WATER MAIN DETAILS

SHEET 4 OF 4

Dn	DW	DATE	FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.
6"	6	TEXAS				
STATE DIST. NO.	COUNTY	CONTROL SECTION NO.	JOB NO.	VIEWWAY NO.		
12	HARRIS					

WD 4129