

TOWN OF
ADDISON
DALLAS COUNTY, TEXAS

CONSTRUCTION PLANS FOR

RATLIFF LANE IMPROVEMENTS

MAYOR :

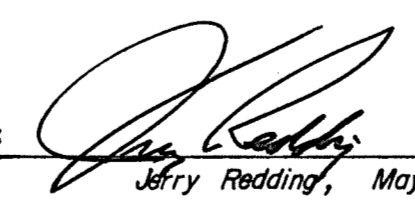
Honorable JERRY REDDING

COUNCIL MEMBERS :

RICHARD RODER, Mayor pro tem
LYNN SPRUILL
BOBBY HATFIELD
JOHN NOLAN
JIM DUFFY

CITY MANAGER :

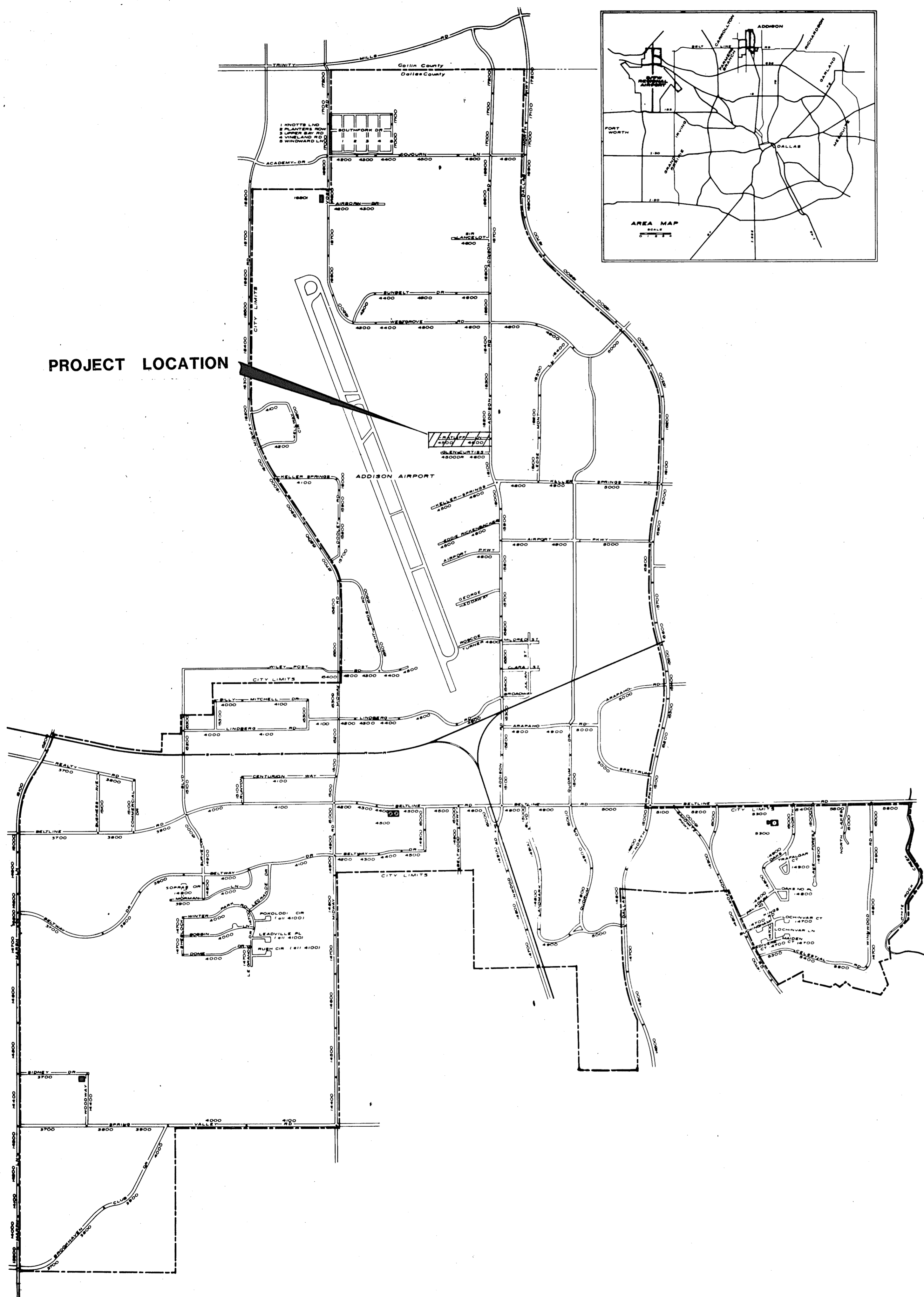
RON WHITEHEAD

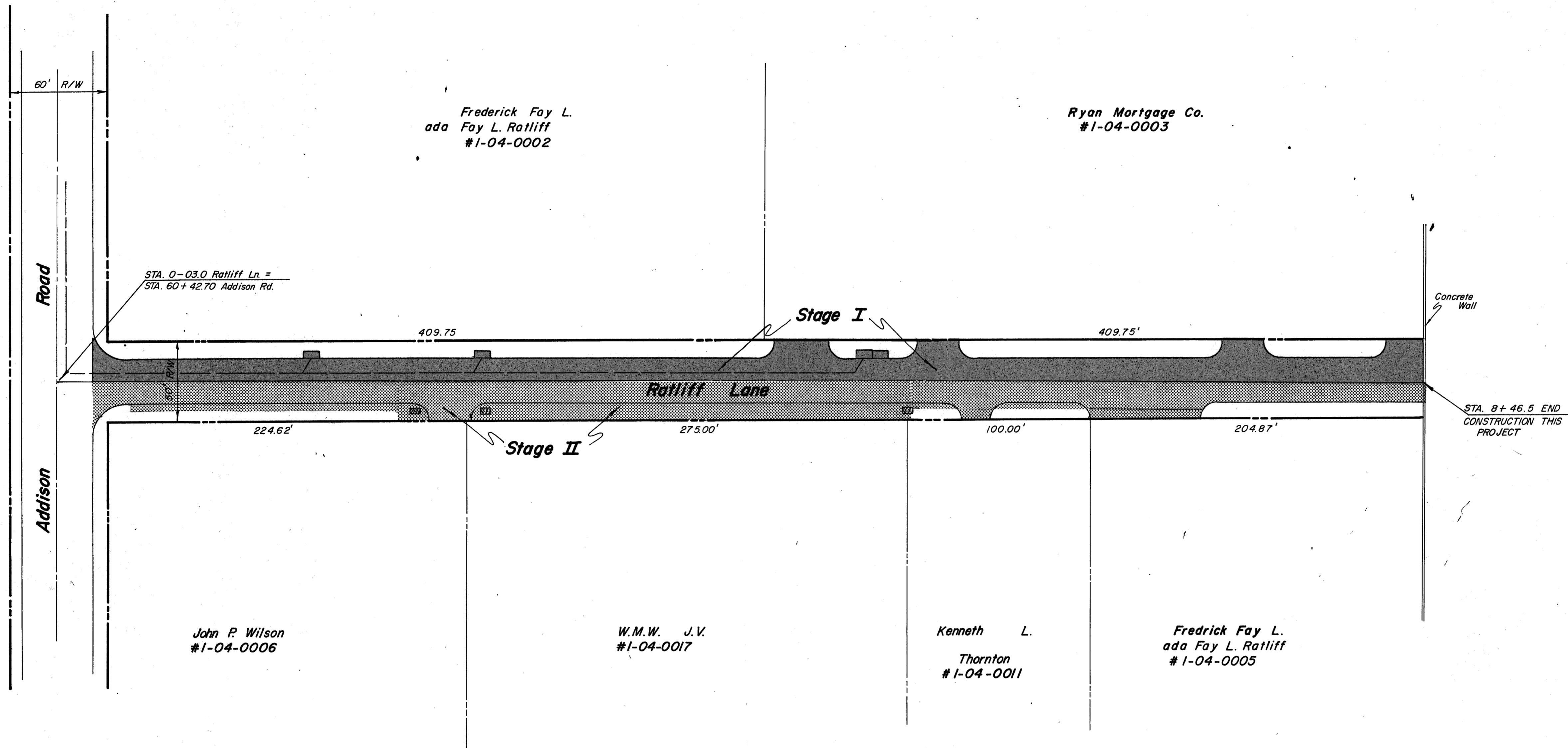
Approved By :  Date : 8-18-87
Jeffery Redding, Mayor of Addison

GINN, INC.
Consulting Engineers Dallas, Texas
MARCH 1987

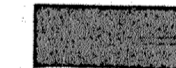



CONTRACT SET





LEGEND

 STAGE I
 STAGE II

SUGGESTED CONSTRUCTION SEQUENCE

PHASE I:

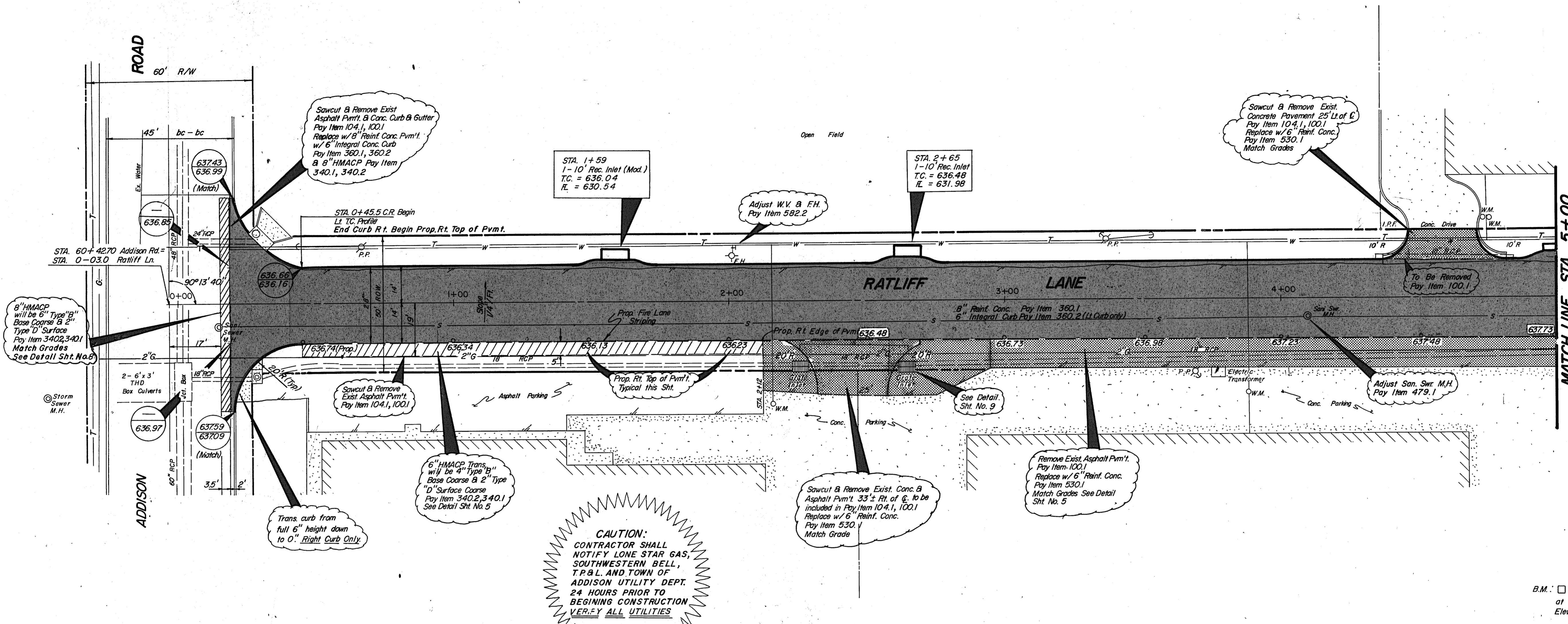
1. Verify all utilities (entire project). Arrange for relocations.
2. Switch two-way traffic onto north side of existing Ratliff Lane; construct storm sewer system south side of Ratliff Lane.
3. Construct concrete pavement and curb (south) half of Ratliff Lane (14' - b.c.).

PHASE II:

1. Switch traffic onto new concrete pavement of Ratliff Lane.
2. Adjust grate inlets to match prop. paving.
3. Construct concrete pavement (north) half of Ratliff Lane including both concrete and asphalt transitions.



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
RATLIFF LANE IMPROVEMENTS			
CONSTRUCTION SEQUENCE & PROPERTY OWNERSHIPS			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - NOVEMBER, 1986	Job No. - 293
Approved - HWG	Checked - RCH	Scale - 1" = 40'	Sheet 3 OF 12



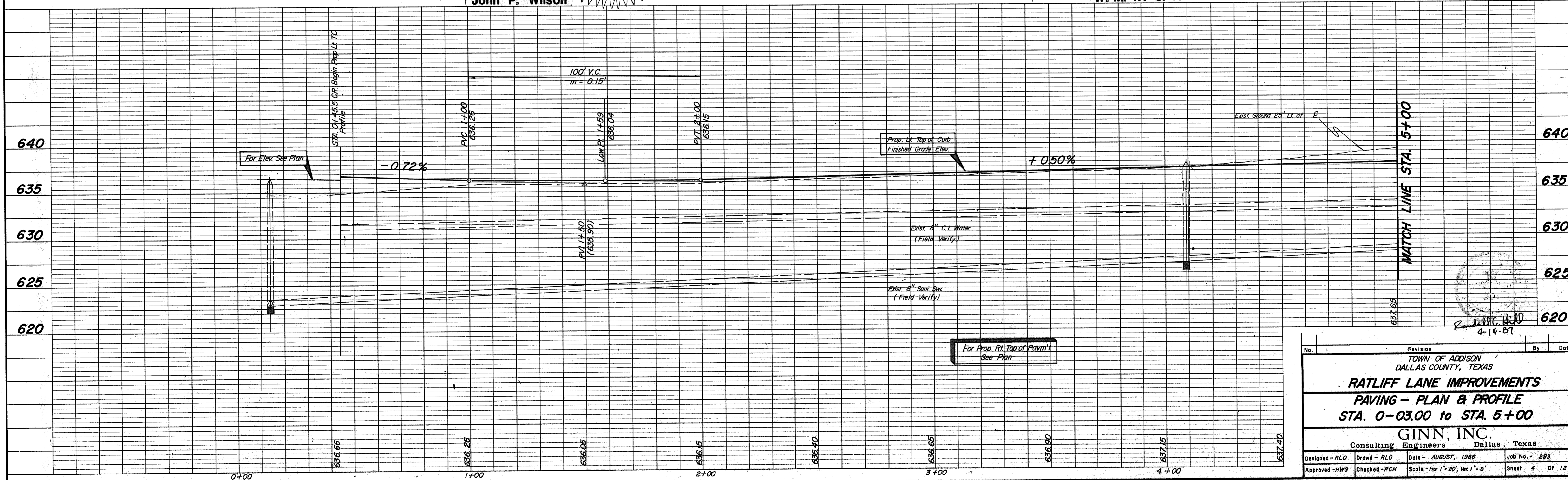
LEGEND

- 8" Reinf. Conc.
- 6" Reinf. Conc.
- H.M.A.C.P.
- TC - Typ. 636.00
- Gut - Typ. 636.00

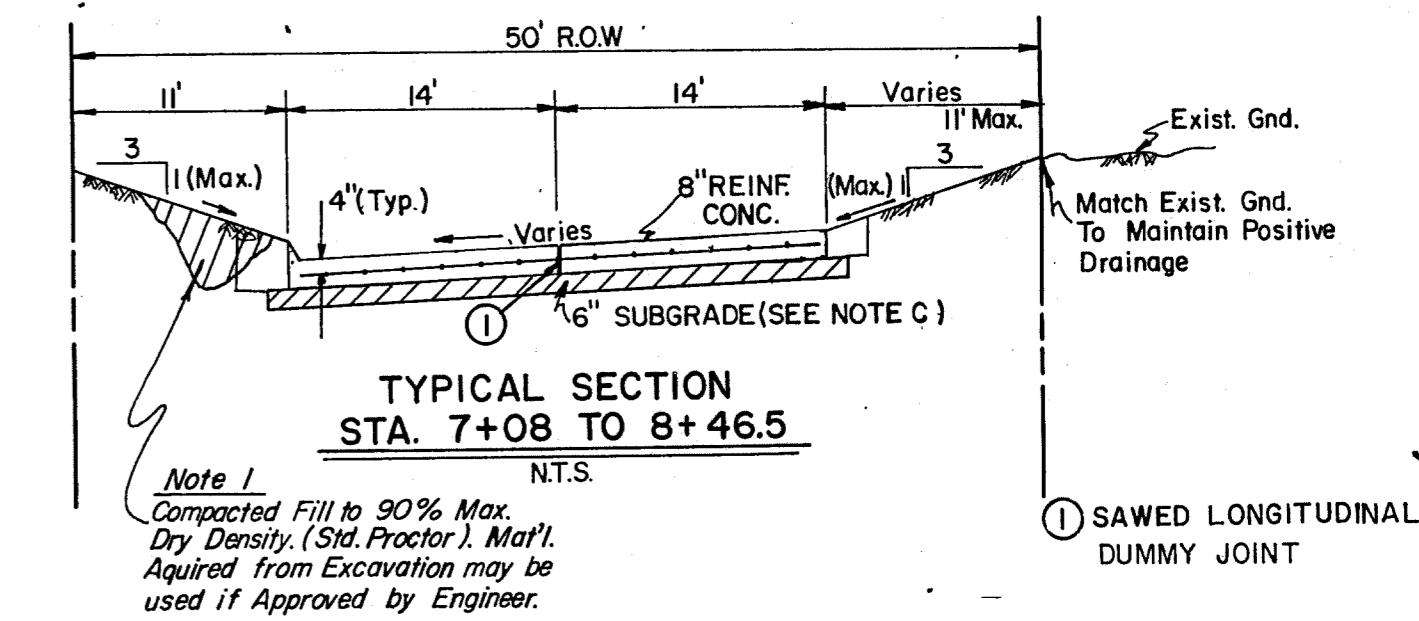
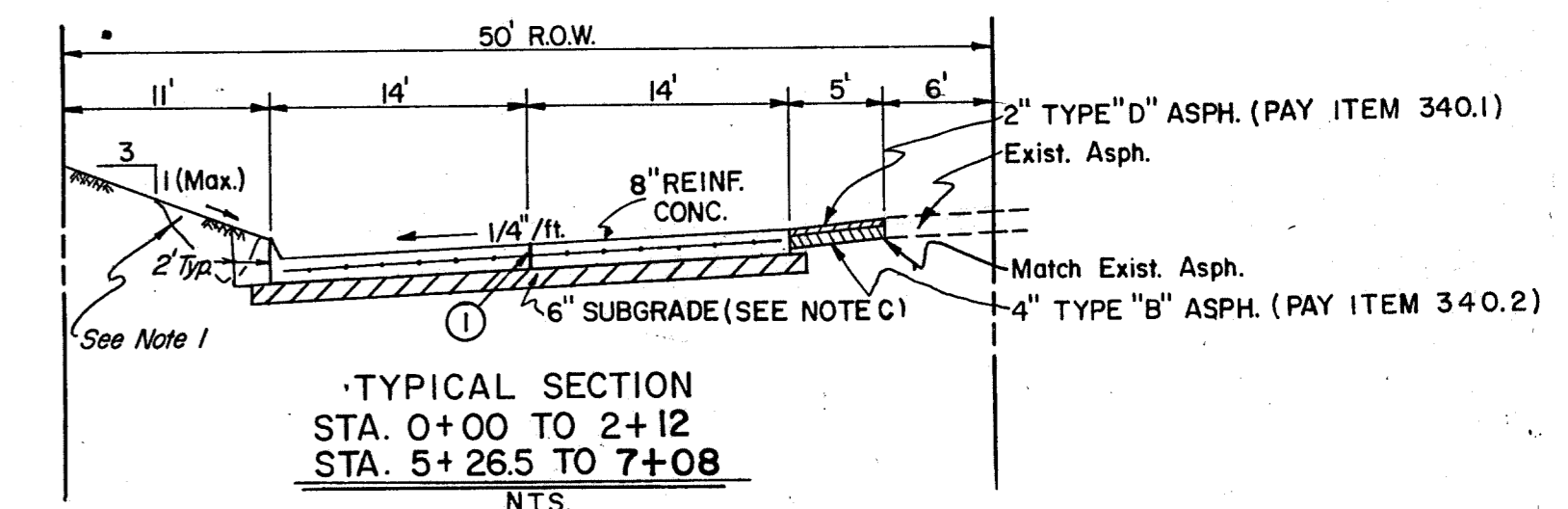
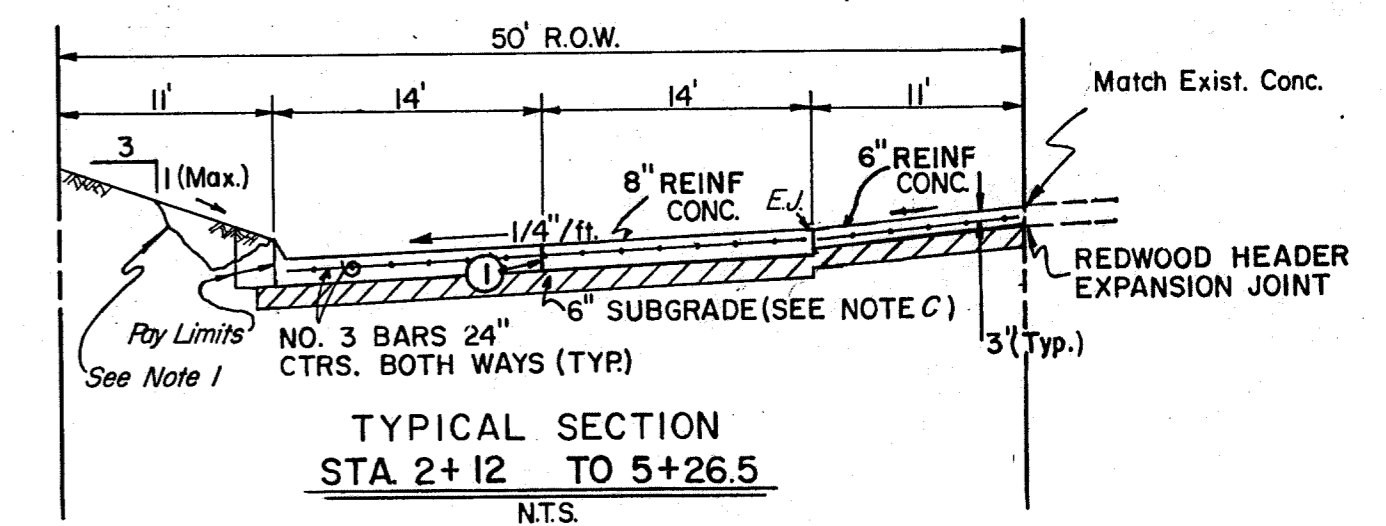
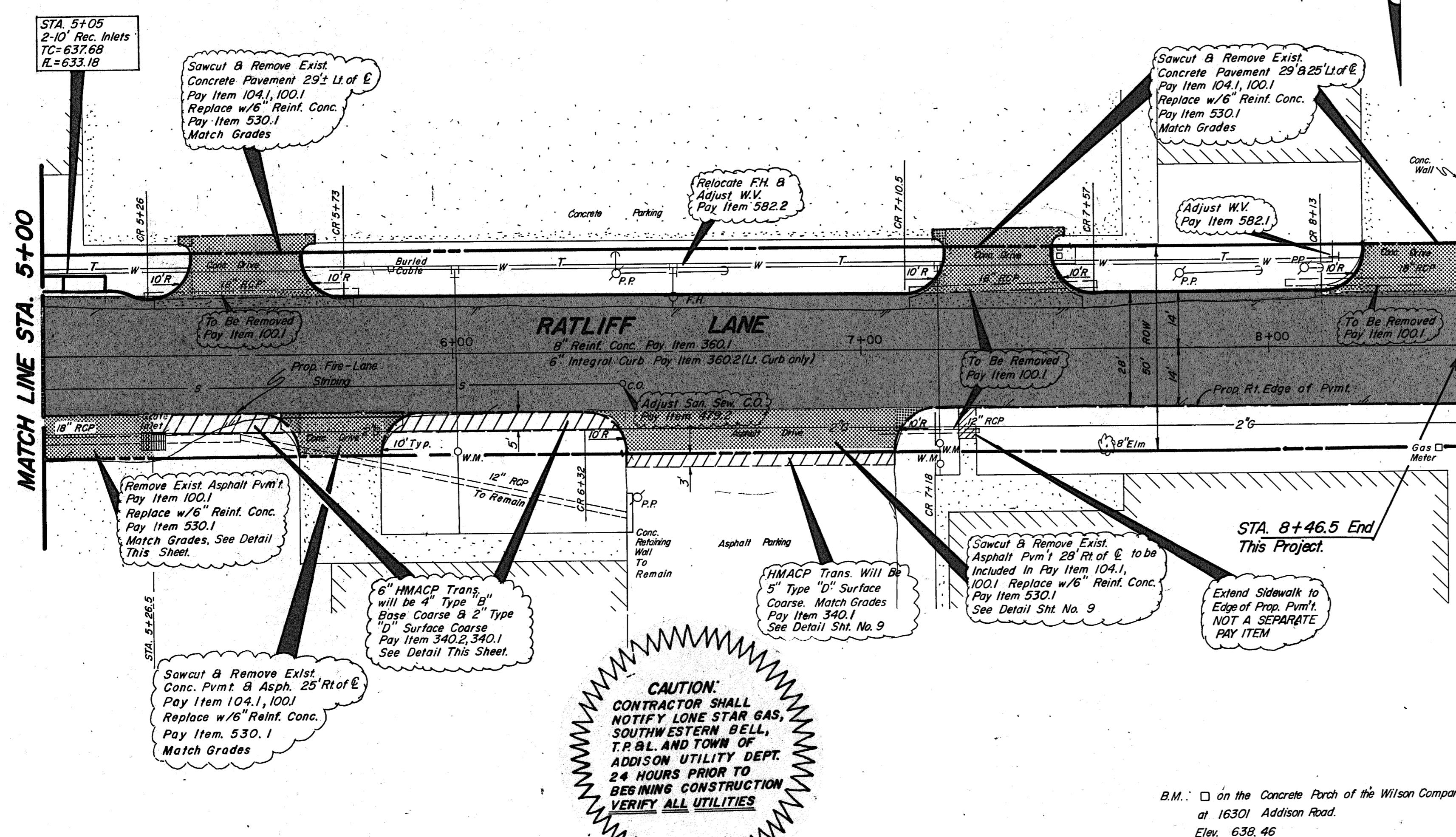
B.M. on the Concrete Pierch of the Wilson Company at 16301 Addison Road. Elev. 638.46

John P. Wilson

W. M. W. J. V.



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
RATLIFF LANE IMPROVEMENTS			
PAVING - PLAN & PROFILE			
STA. 0-03.0 to STA. 5+00			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - AUGUST, 1986	Job No. - 293
Approved - HWG	Checked - RCH	Scale - Hor. 1" = 20', Ver. 1" = 5'	Sheet 4 of 12



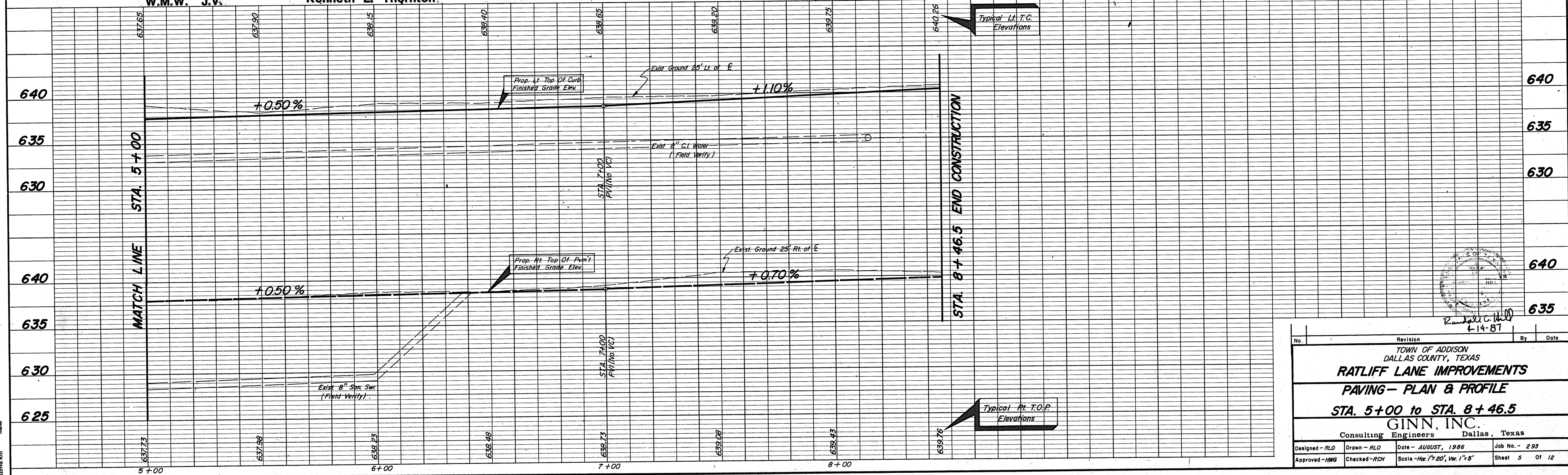
- GENERAL NOTES**
- A. General
Pavement thickness for street shall be as specified on typical sections.
- Standard Specifications
- B. Reinforced Concrete Pavements (3000 psi (6 Sack Mix) @ 28 days)
- All curbs shall be placed integral with pavement.
 - Curbs shall meet the same compressive strength as specified for the concrete pavement.
 - Detail and Arrangement of Joints, all types, shall be as shown on the Paving Detail Sht. - Sht. No. 7 or as approved by Engineer.
 - Bar laps shall be 30 diameters.
- C. Subgrade
Subgrade under all pavement shall be 6 inches thick and shall be stabilized with 6 percent by weight of hydrated lime (27 lbs/s.y.) and compacted to a density not less than 95 percent as determined by A.A.S.H.O. T-99. Laboratory tests may be submitted to the Engineer for approval to lower amount of lime required.
- D. Bar chairs or an approved supporting device shall be furnished.
- E. Cross slope shall be 1/4" per foot unless otherwise noted or approved by Engineer.

CAUTION:
CONTRACTOR SHALL NOTIFY LONE STAR GAS, SOUTHWESTERN BELL, T.P. & L. AND TOWN OF ADDISON UTILITY DEPT. 24 HOURS PRIOR TO BEGINNING CONSTRUCTION. VERIFY ALL UTILITIES.

B.M. □ on the Concrete Porch of the Wilson Company at 16301 Addison Road. Elev. 638.46

W.M.W. J.V. Kenneth L. Thornton

T. F. Stone Companies, Inc.



Randall C. Hill
4-14-87

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
RATLIFF LANE IMPROVEMENTS			
PAVING - PLAN & PROFILE			
STA. 5+00 to STA. 8+46.5			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - AUGUST, 1986	Job No. - 293
Approved - HWG	Checked - RCH	Scale - Hor. 1"=20', Ver. 1"=5'	Sheet 5 of 12

RUNOFF COMPUTATIONS

AREA		TOTAL CA	T _c Minutes	10 YR.		100 YR.	
NO.	ACRES			I ₁₀ in/hr	Q ₁₀ c.f.s.	I ₁₀₀ in/hr	Q ₁₀₀ c.f.s.
1	1.10	0.99	10	5.7	7.8	7.7	
2	1.90	1.71		9.7		13.3	
3	2.13	1.92		10.9		15.0	
4	1.45	1.31		7.5		10.2	

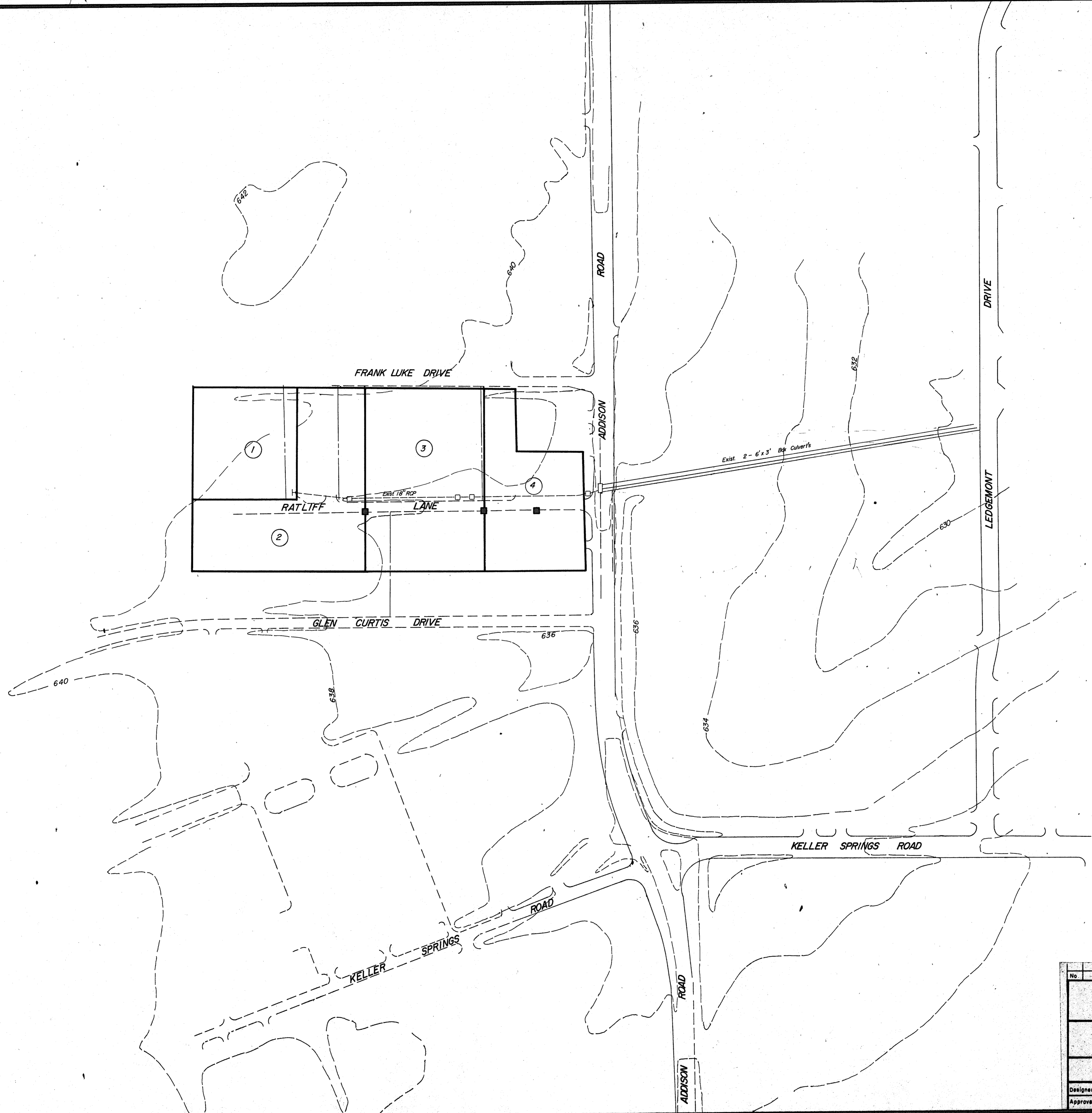
$Q = A \times C \times I$

Where: Q = Flow in cfs

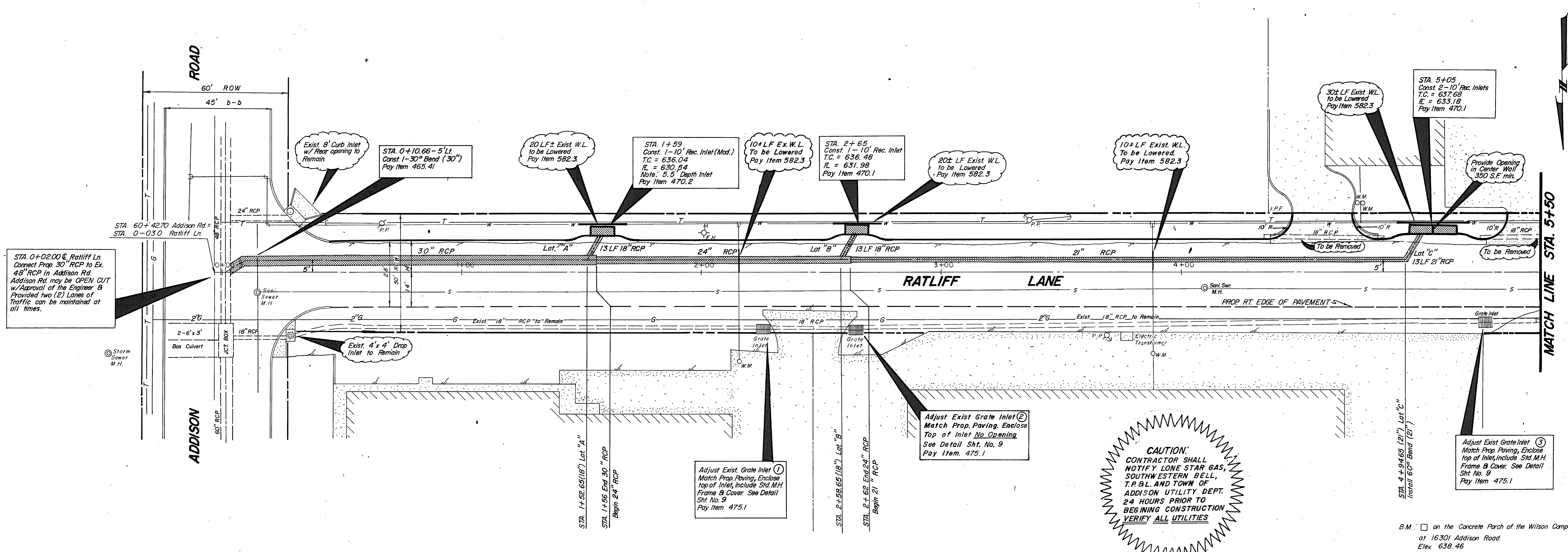
A = Area, See Table

C = 0.90

I = Intensity, See Table

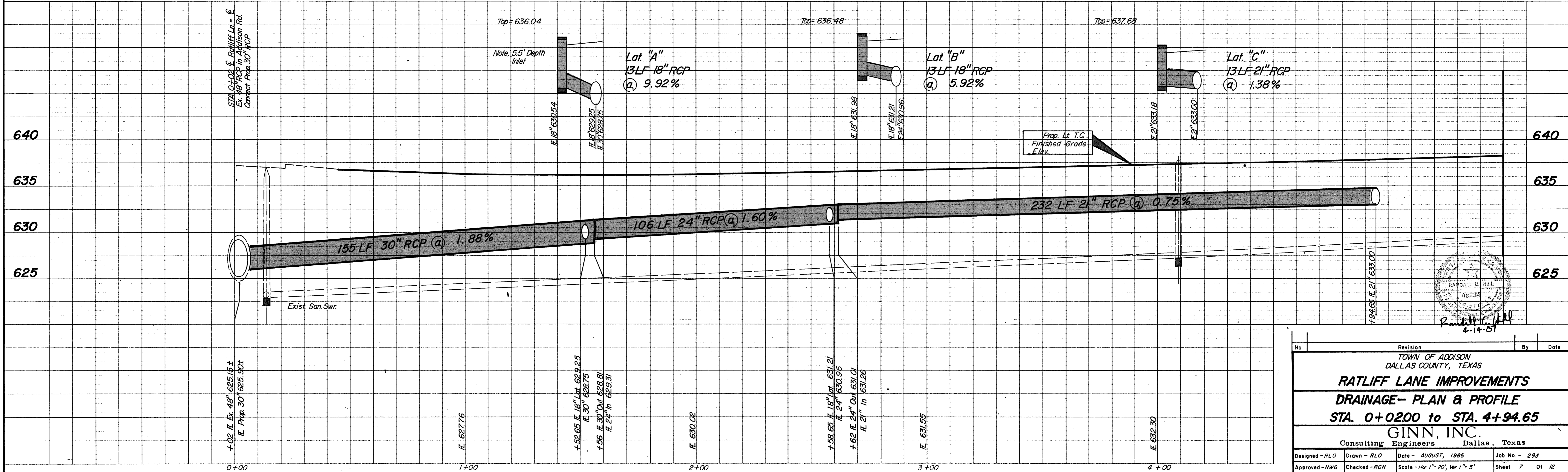


No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS RATLIFF LANE IMPROVEMENTS			
DRAINAGE AREA MAP			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - September, 1986	Job No. - 293
Approved - HWB	Checked - RCH	Scale - 1" = 100'	Sheet 6 OF 12

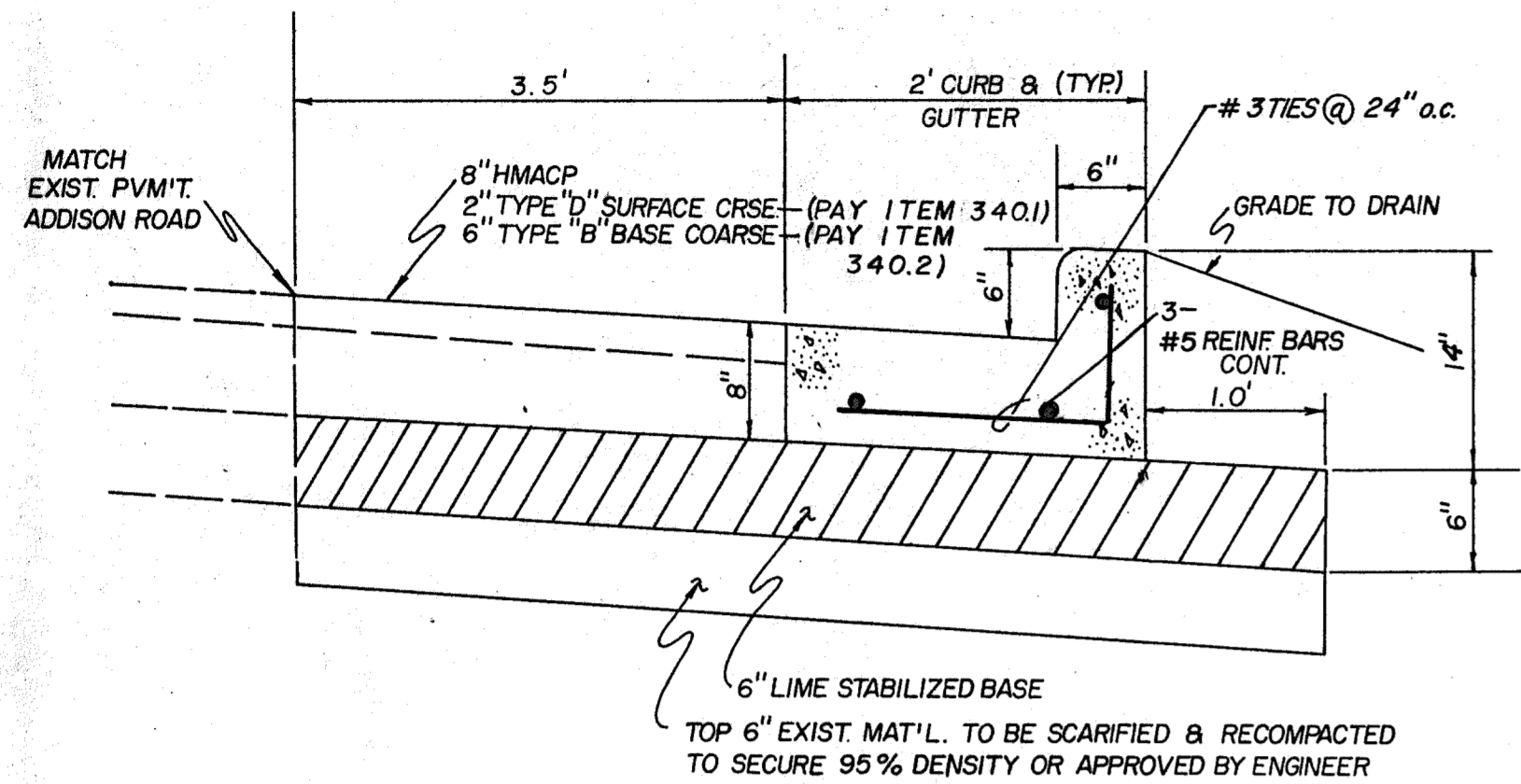


John P. Wilson

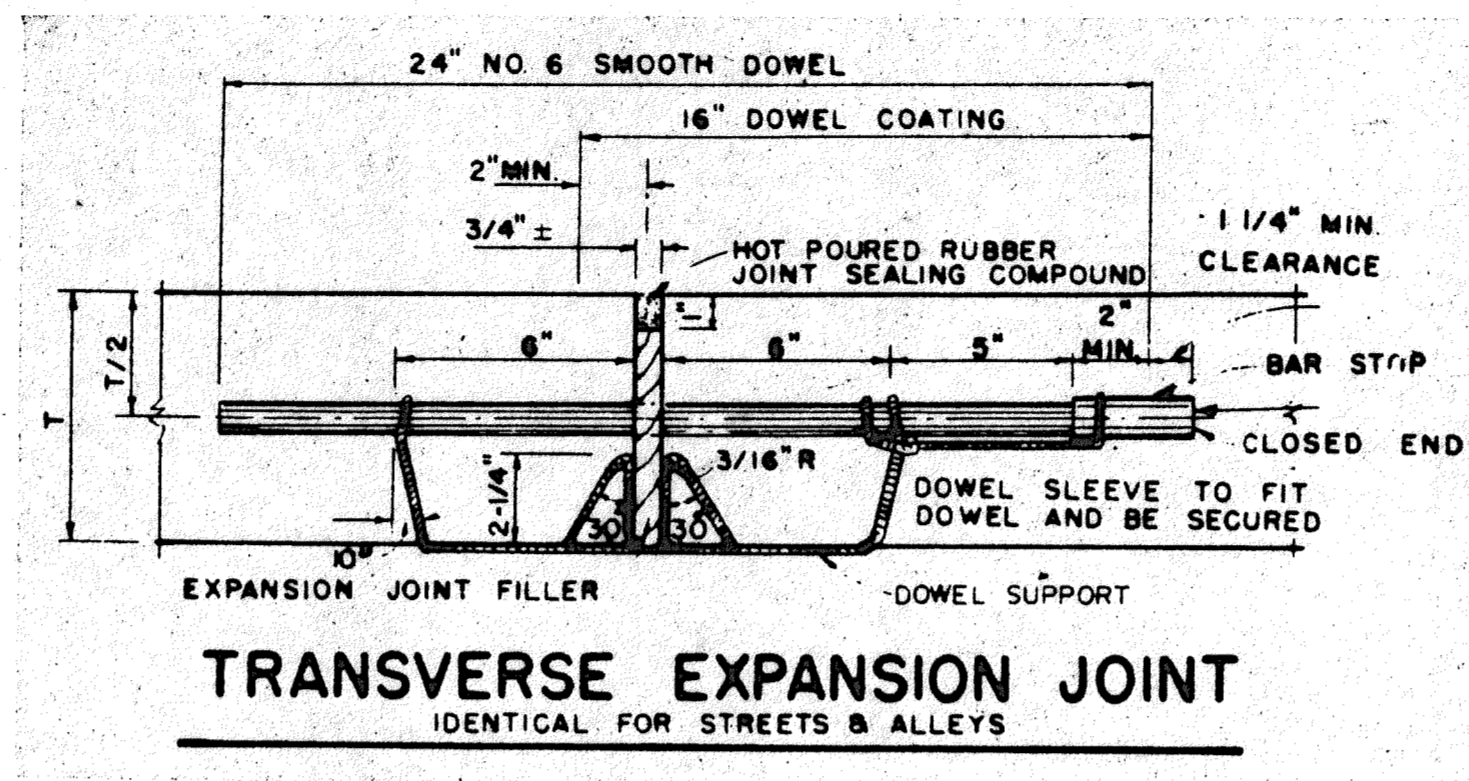
W. M. W. J. V.



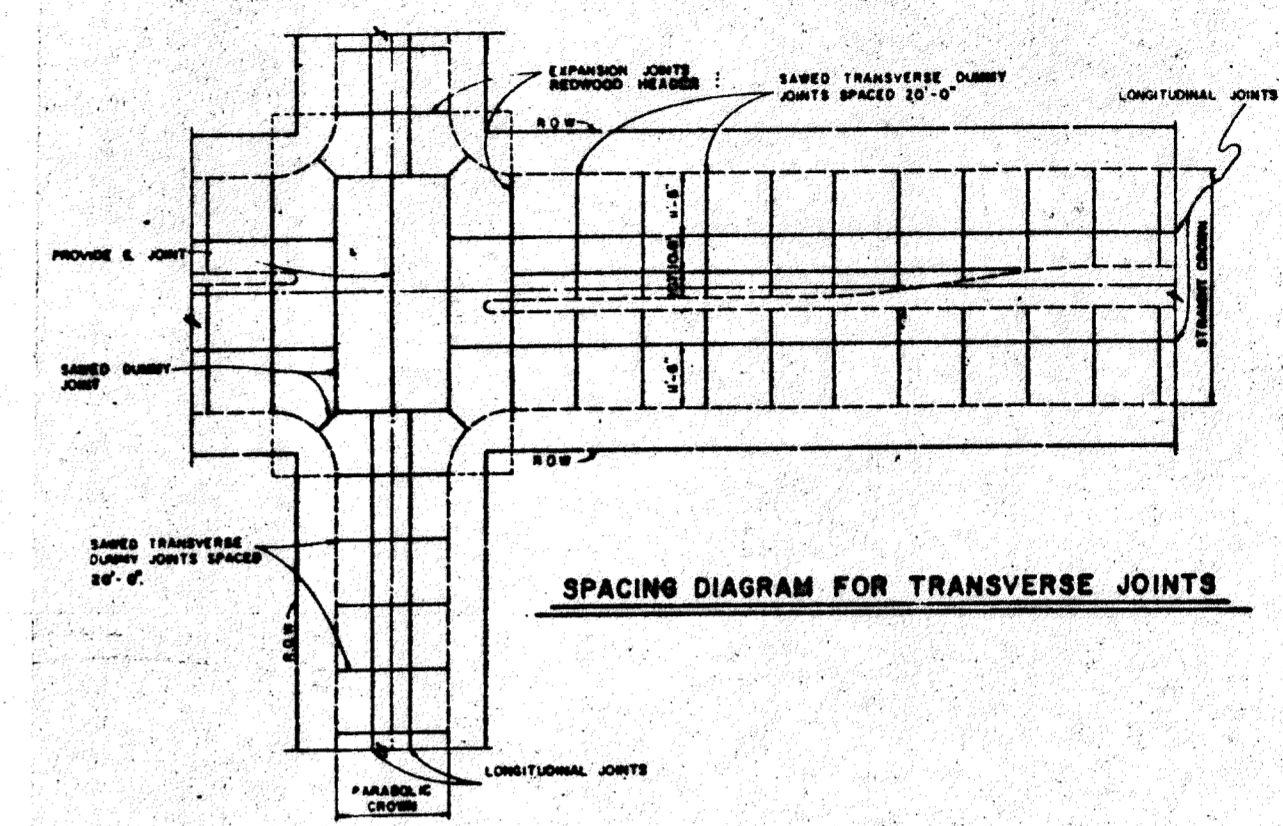
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
RATLIFF LANE IMPROVEMENTS			
DRAINAGE- PLAN & PROFILE			
STA. 0+02.00 to STA. 4+94.65			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RLO	Drawn - RLO	Date - AUGUST, 1986	Job No. - 293
Approved - HWG	Checked - RCH	Scale - Hor 1" = 20', Ver 1" = 5'	Sheet 7 of 12



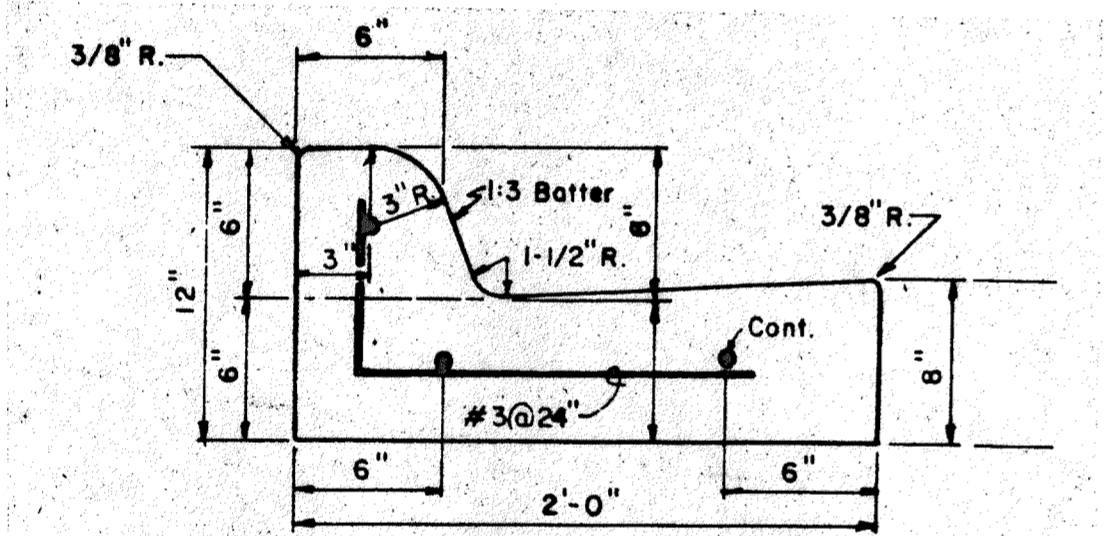
SECTION - TYP. @ ADDISON ROAD



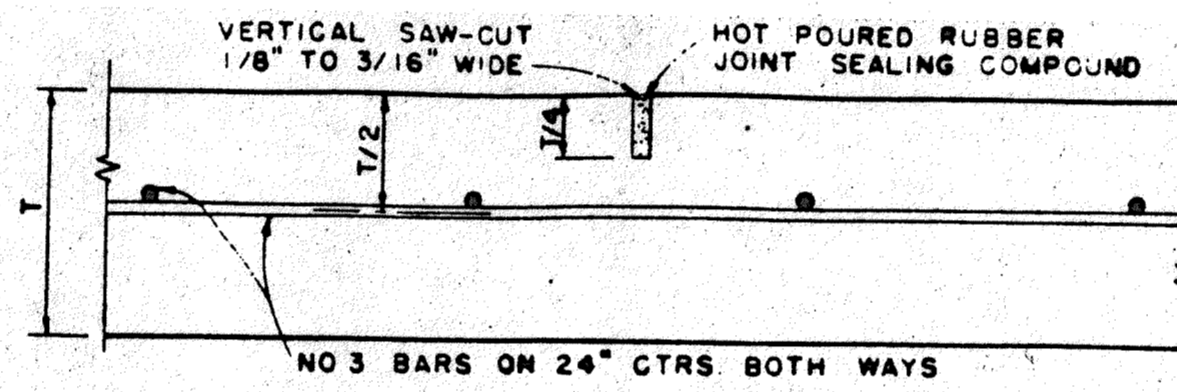
TRANSVERSE EXPANSION JOINT
IDENTICAL FOR STREETS & ALLEYS



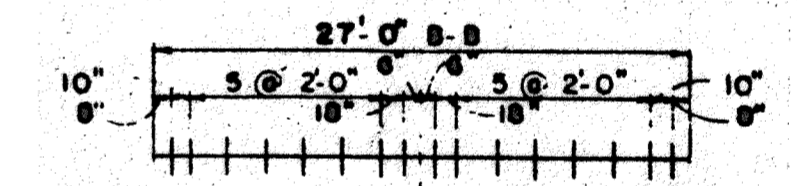
SPACING DIAGRAM FOR TRANSVERSE JOINTS



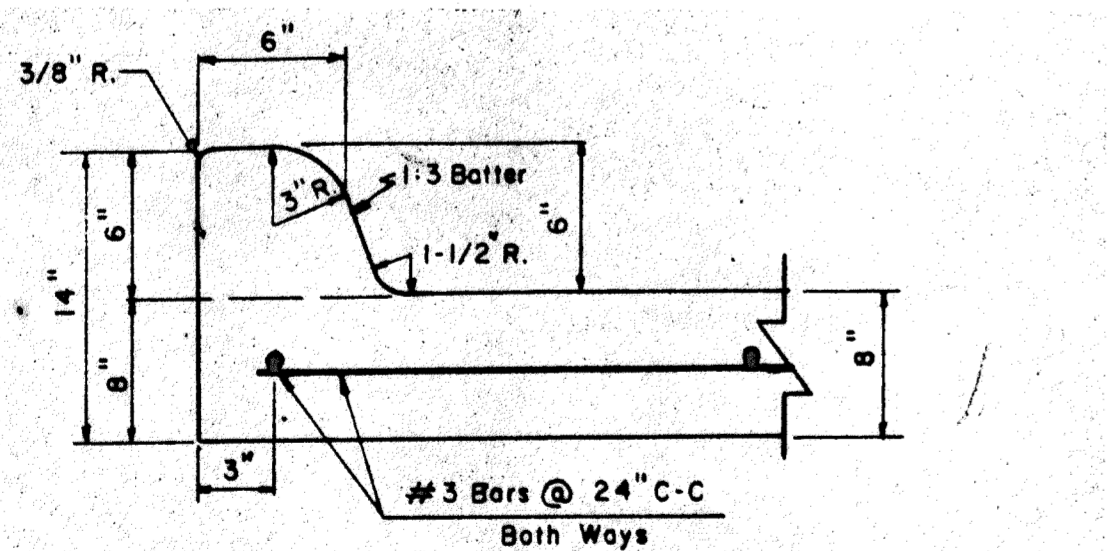
SEPARATE CURB & GUTTER
REINFORCEMENT SHALL BE No. 5 BARS



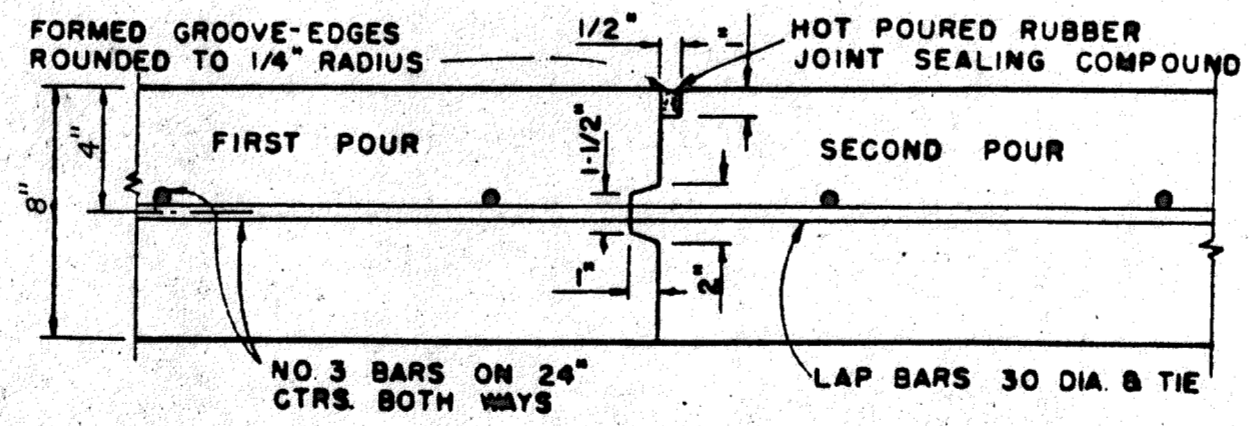
SAWED DUMMY JOINT
IDENTICAL FOR STREETS AND ALLEYS EXCEPT ALLEY LONGITUDINAL REINFORCEMENT BARS



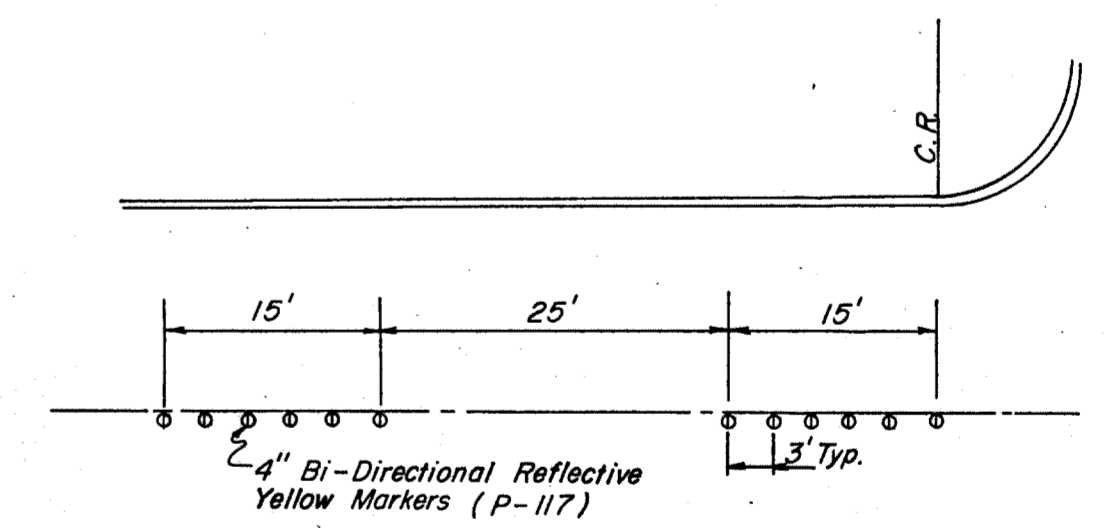
SPACING DIAGRAM FOR DOWELS AT EXPANSION JOINT



6" INTEGRAL CURB & GUTTER DETAIL



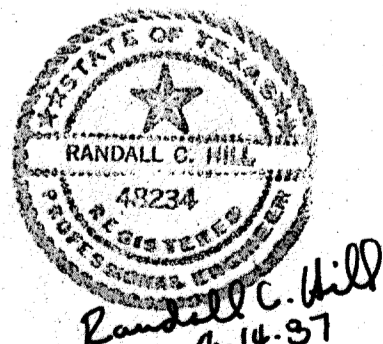
CONSTRUCTION JOINT
FOR 8" THICKNESS PAVEMENT OR BASE



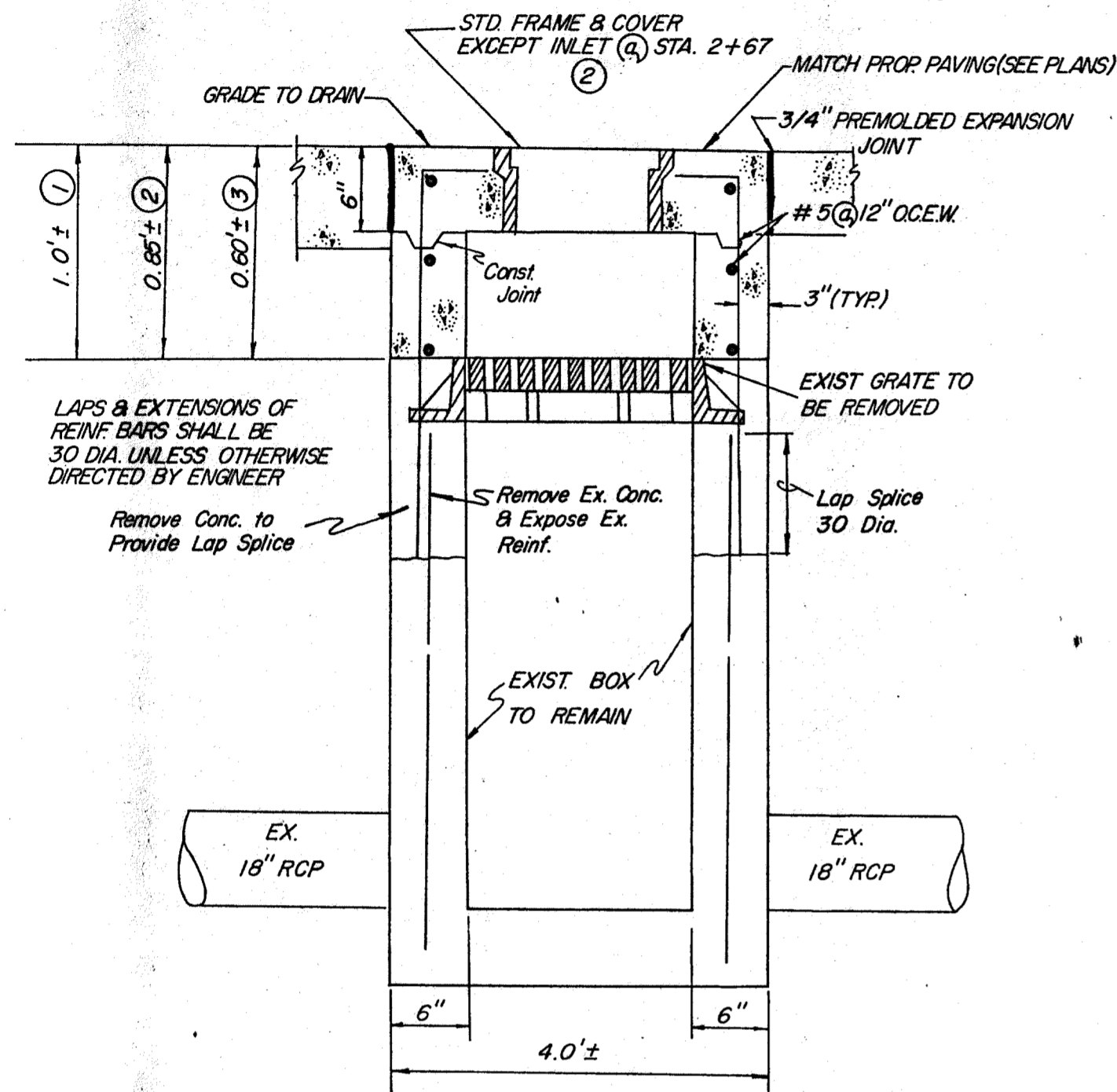
Markers are to be installed off of joints w/ Machine Implemented 2-Part Component Epoxy.

STANDARD BUTTON LAYOUT

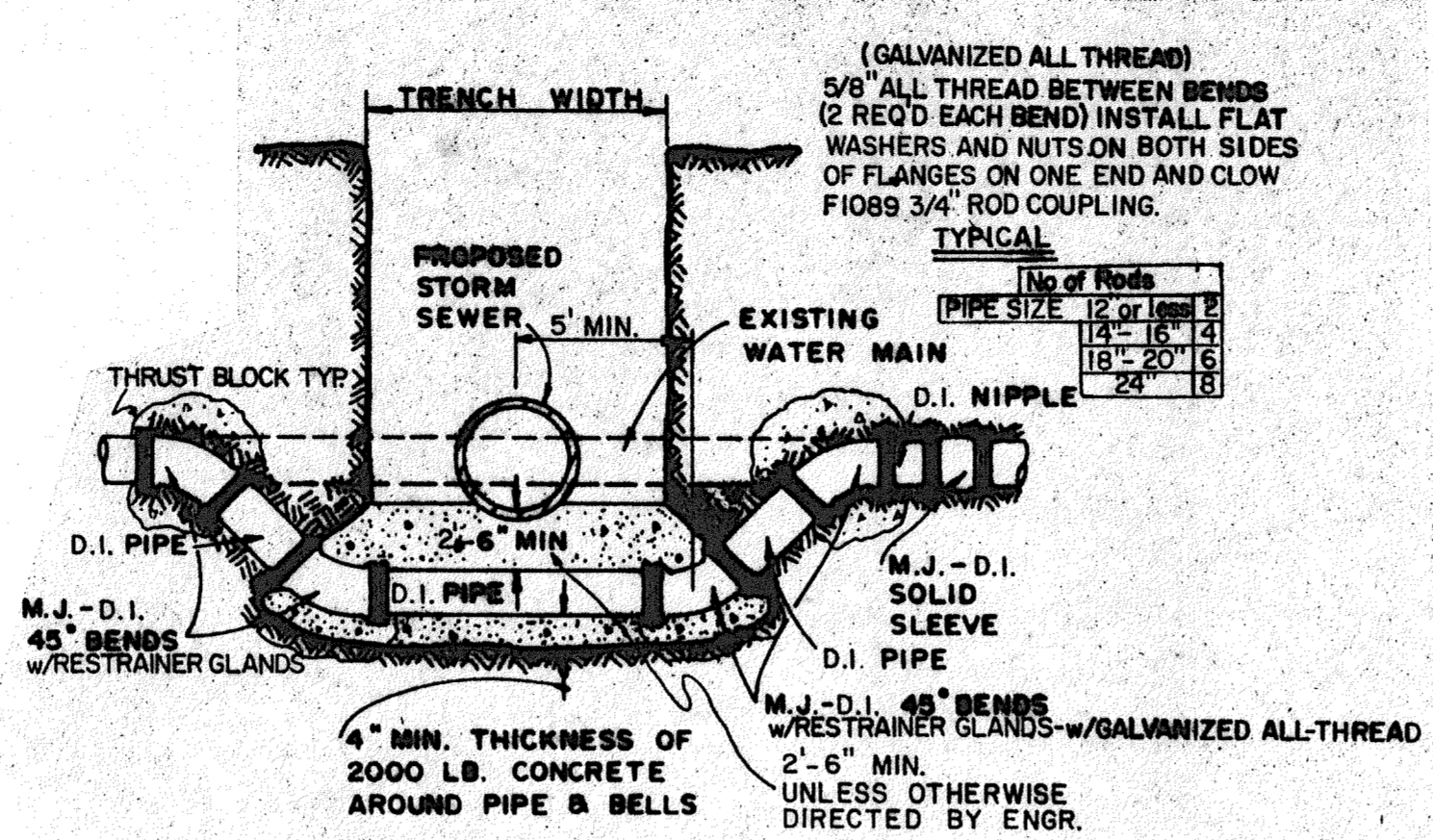
Reflective Markers are to be Placed 4" off of C. Side to be Determined by Field Engineer.



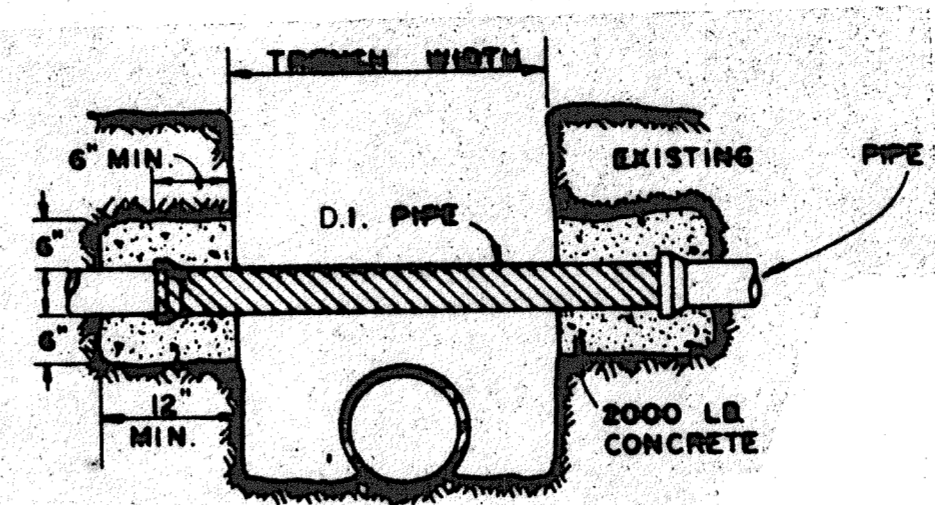
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS DEPT. OF ENGINEERING STD. CONSTRUCTION DETAILS PAVING DETAILS GINN, INC. Consulting Engineers Dallas, Texas			
Designed - GINN, INC.	Drawn - GINN, INC.	Date - OCT., 1996	Job No. - 293
Approved - HWG	Checked - GINN, INC.	Scale - N/A	Sheet 8 OF 12



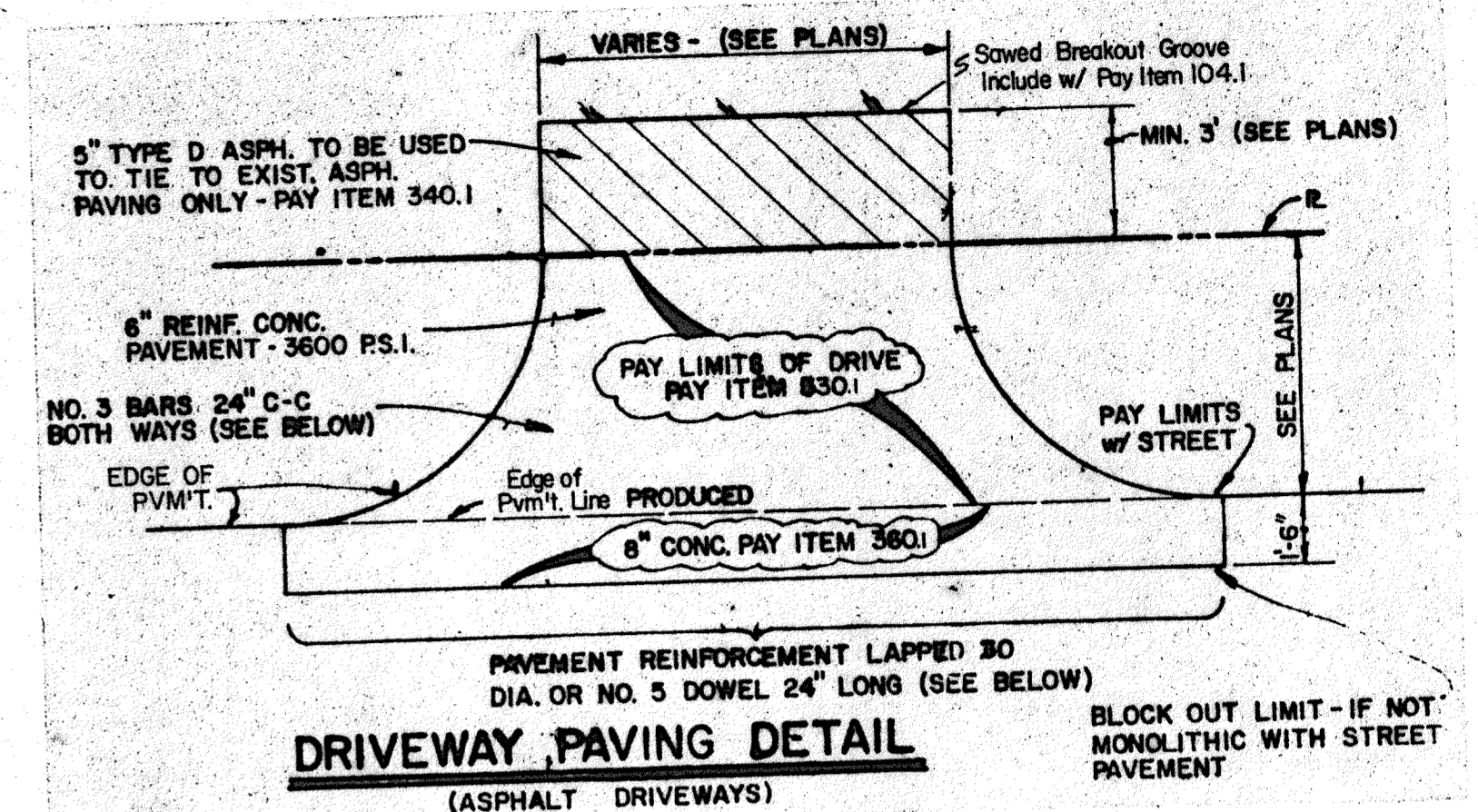
GRATE INLET ADJUSTMENT DETAIL



DETAIL FOR WATER MAIN LOWERING



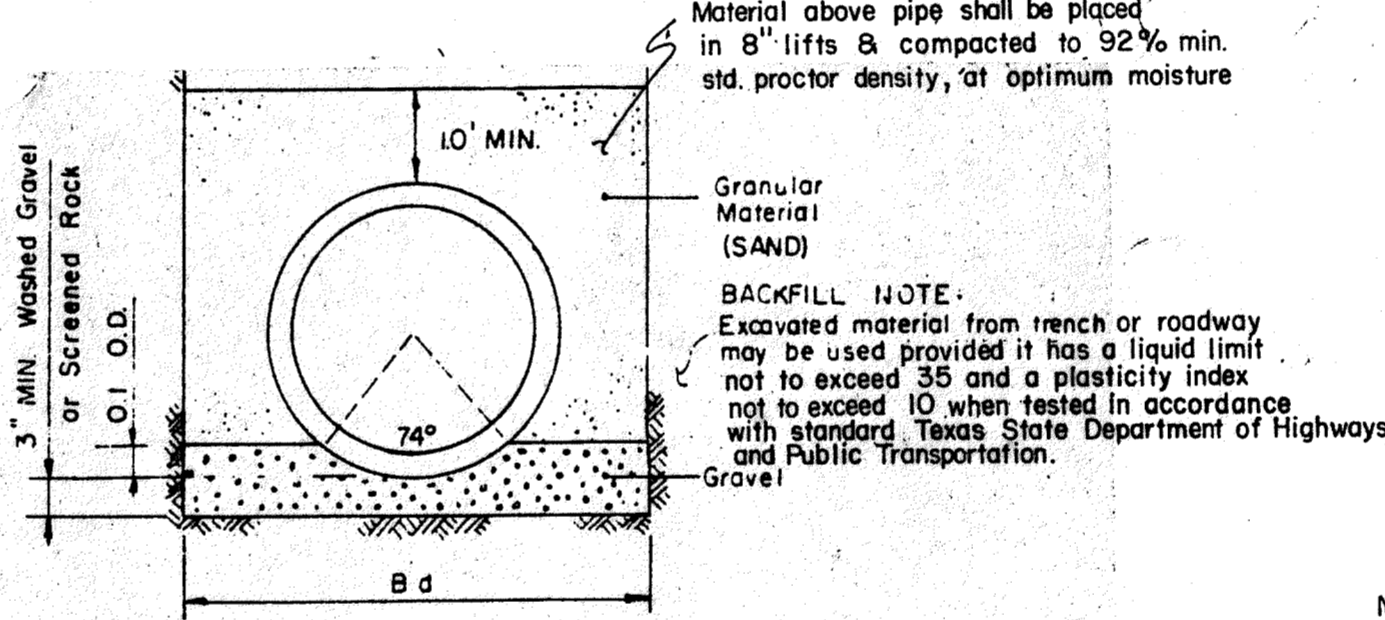
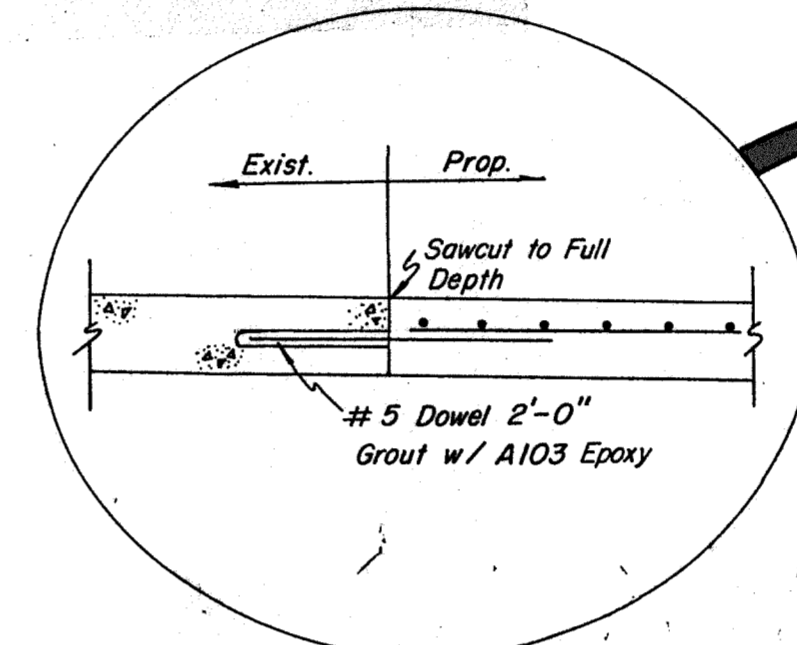
DETAIL OF UTILITY SUPPORT



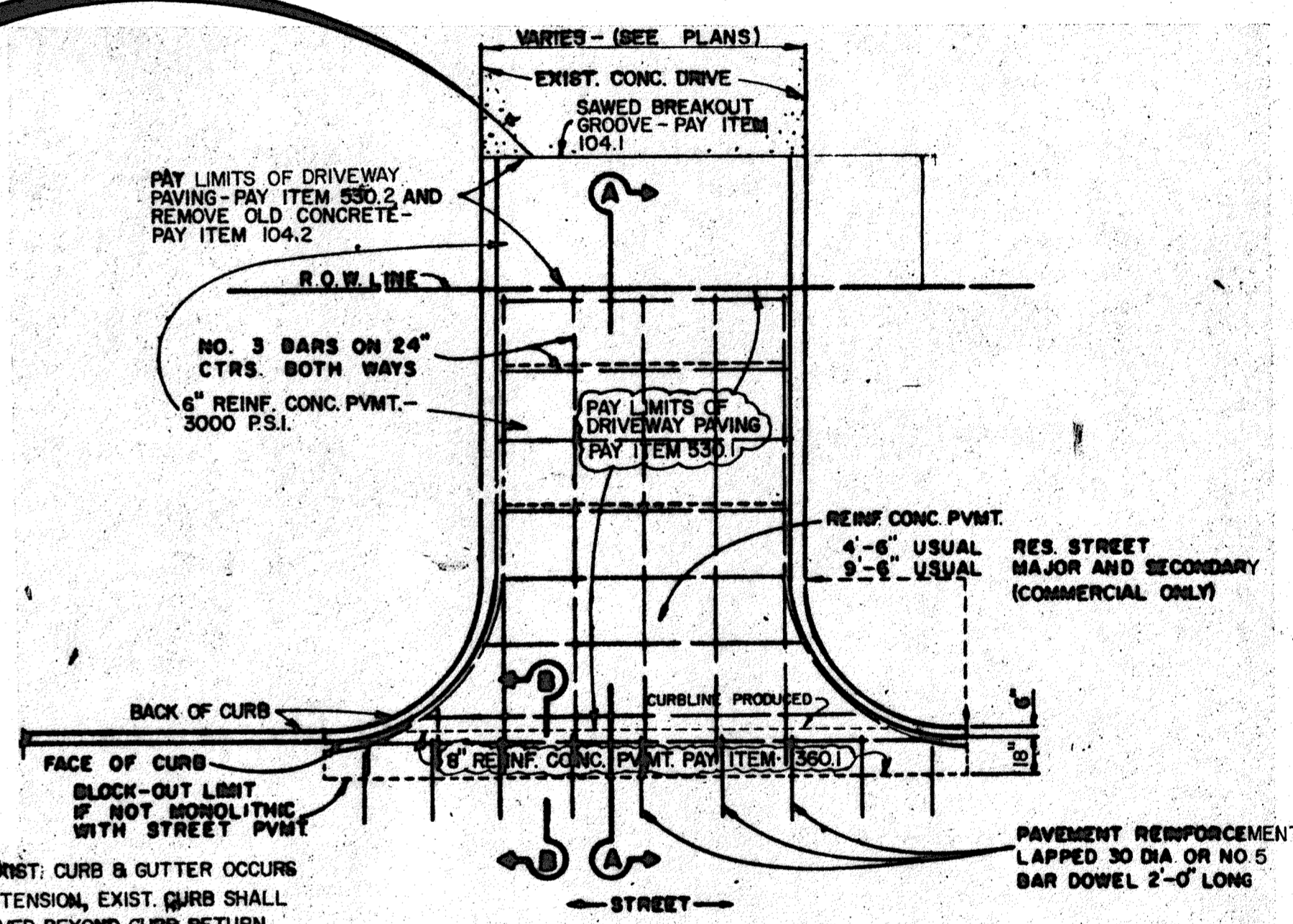
DRIVEWAY PAVING DETAIL (ASPHALT DRIVEWAYS)

STORM SEWER EMBEDMENT

PIPE DIAM.	I. D.	O. D.	B d	CU. YDS. Per 100 L.F.	
				GRAVEL	GRANULAR MATERIAL
15"	19"	39"	39"	4.53	22.28
18"	22.5"	42"	42"	5.13	25.15
21"	26"	45"	45"	5.76	28.03
24"	29.5"	48"	48"	6.42	30.94
27"	33"	51"	51"	7.11	33.86
30"	37"	54"	54"	7.85	36.72
33"	40.5"	57"	57"	8.59	39.64
36"	44"	60"	60"	9.36	42.58
39"	47.5"	63"	63"	10.16	45.53
42"	51"	66"	66"	10.99	48.51
48"	58"	72"	72"	12.72	54.51
54"	65"	78"	78"	14.57	60.57
60"	72"	84"	84"	16.53	66.71
66"	79"	90"	90"	18.60	72.92
72"	86"	96"	96"	20.79	79.19
78"	93"	102"	102"	23.08	85.53
84"	100"	108"	108"	25.49	91.95
90"	108.5"	115"	115"	28.47	99.02
96"	114"	120"	120"	30.64	104.98
102"	122.5"	129"	129"	34.66	118.41

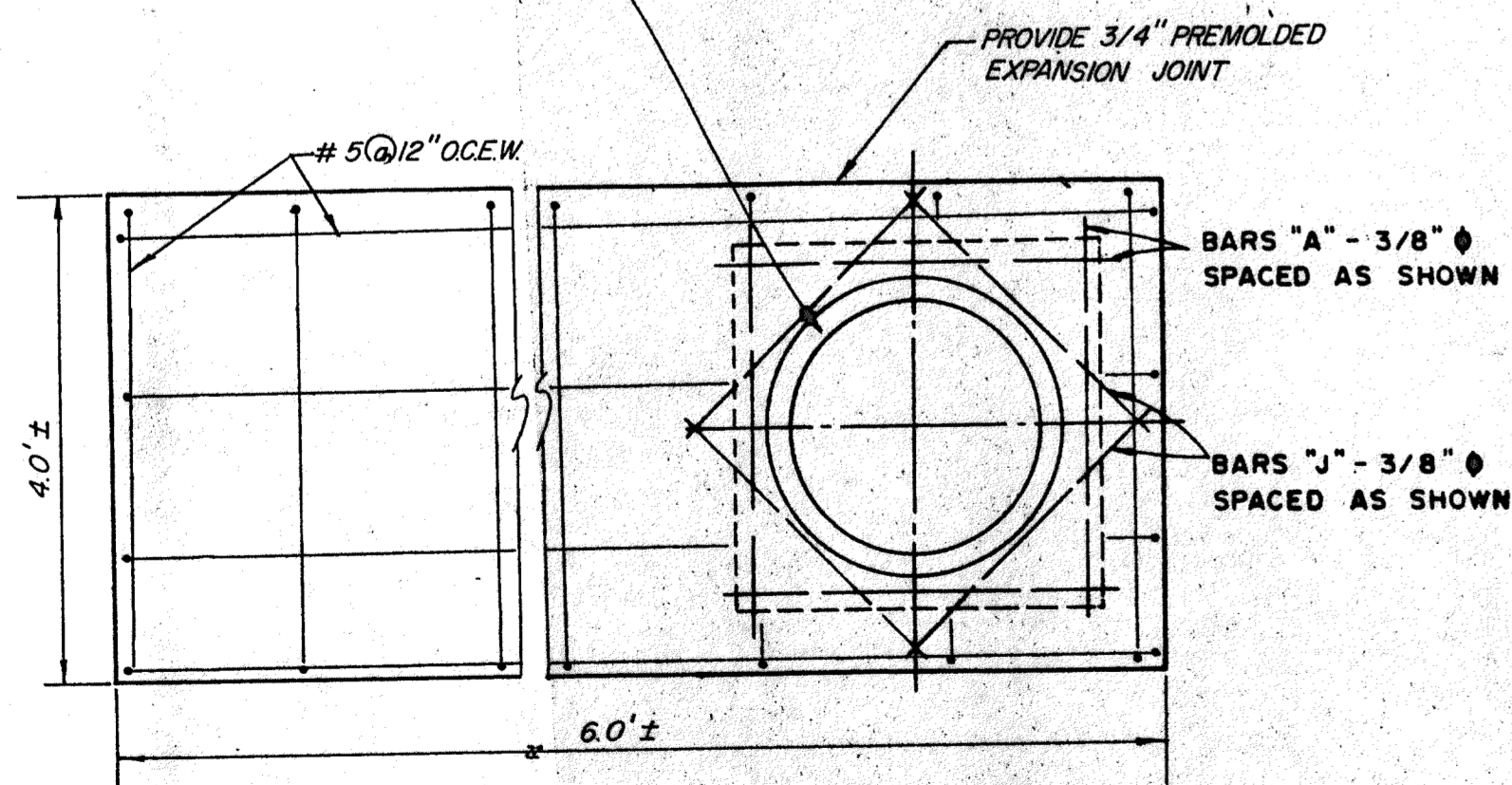


STORM SEWER EMBEDMENT

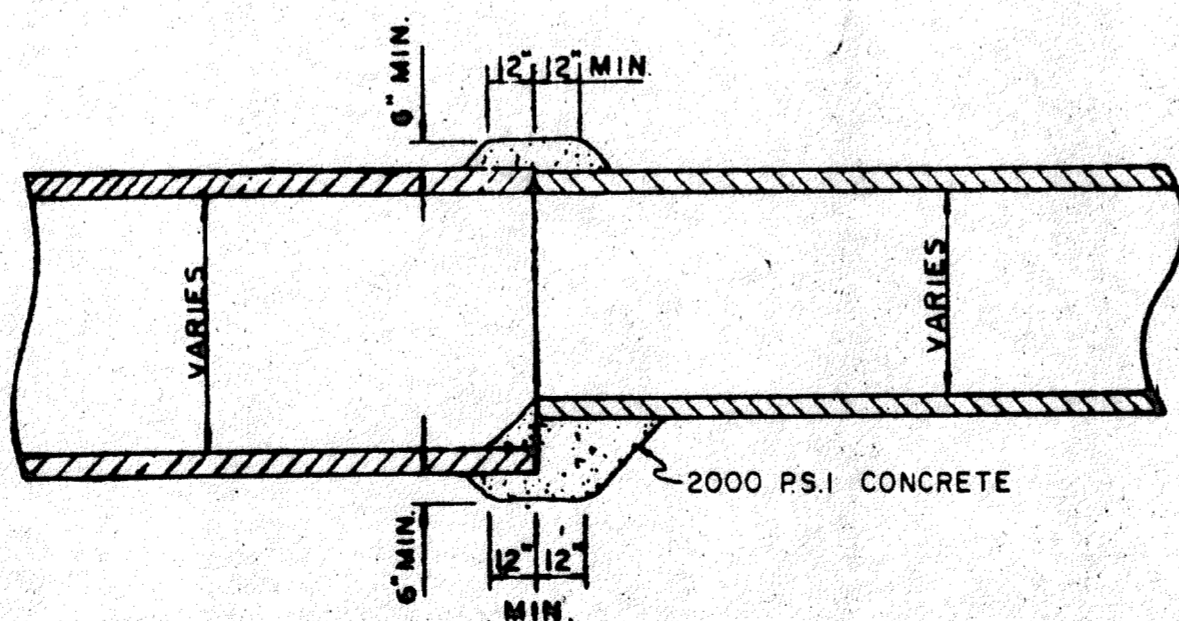


DRIVEWAY RETURN TO STREET (CONCRETE DRIVEWAYS)

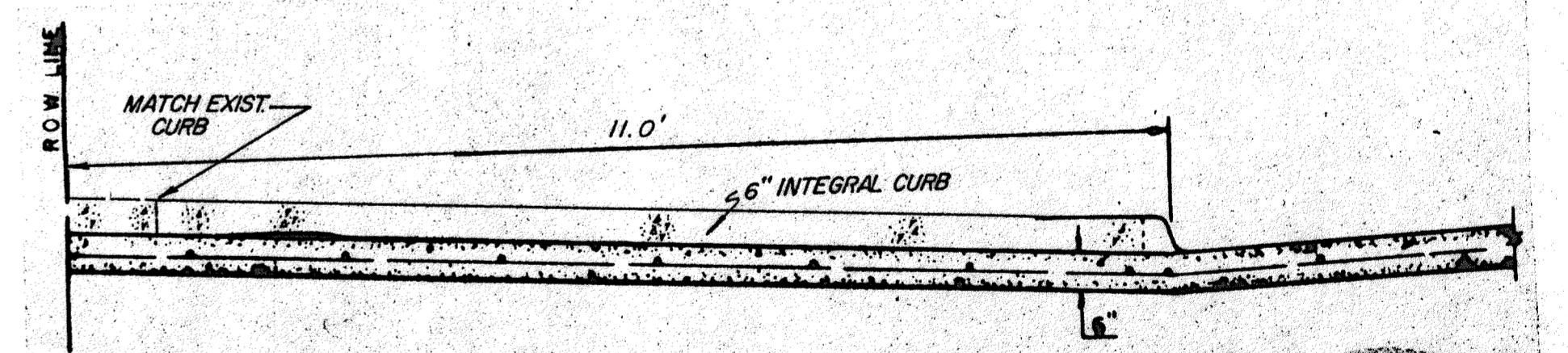
NOTE: FRAME AND COVER SHALL BE BASS & HAYS PATTERN NO. 380-24 OR EQUAL AND SHALL BE OF GRAY CAST IRON CONFORMING TO A.S.T.M. SPEC. A-48 FOR CLASS 30 CAST IRON. EXCEPT INLET @ STA. 2+67



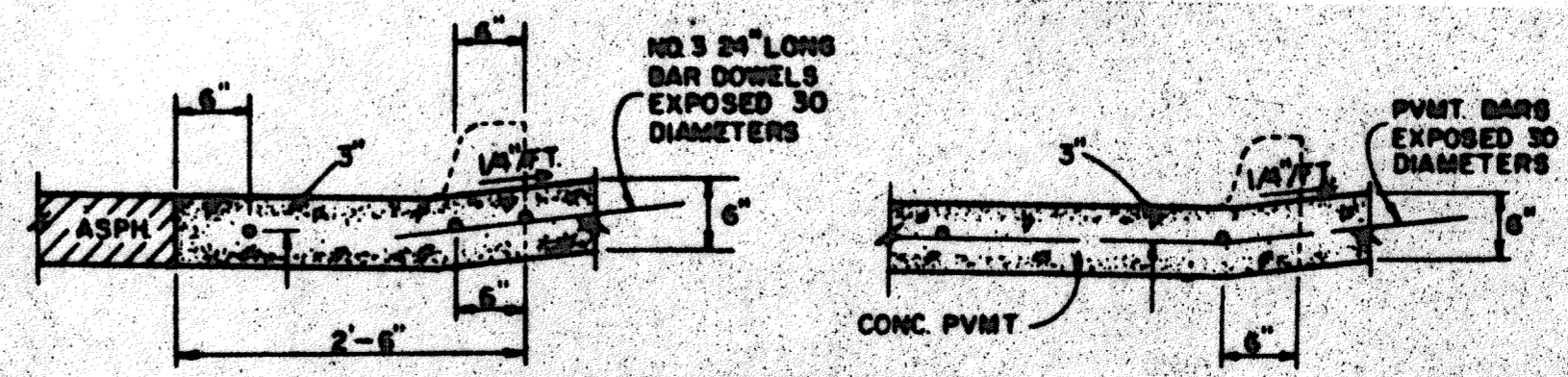
TOP PLAN



DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS



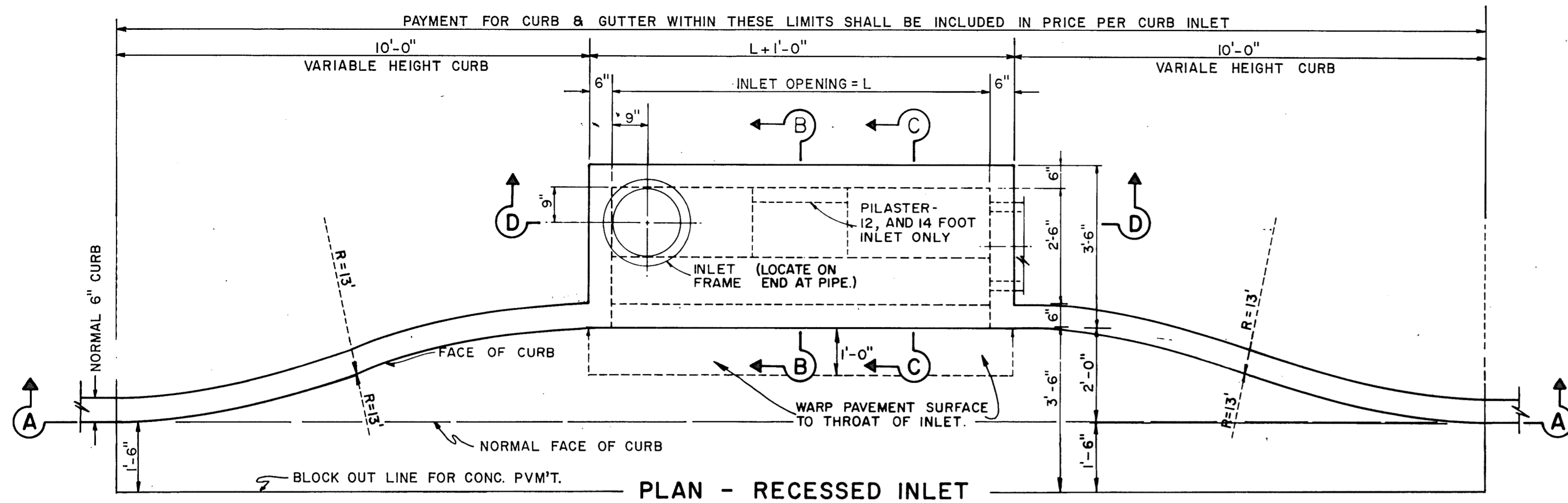
SECTION A-A SOUTH DRIVES ONLY



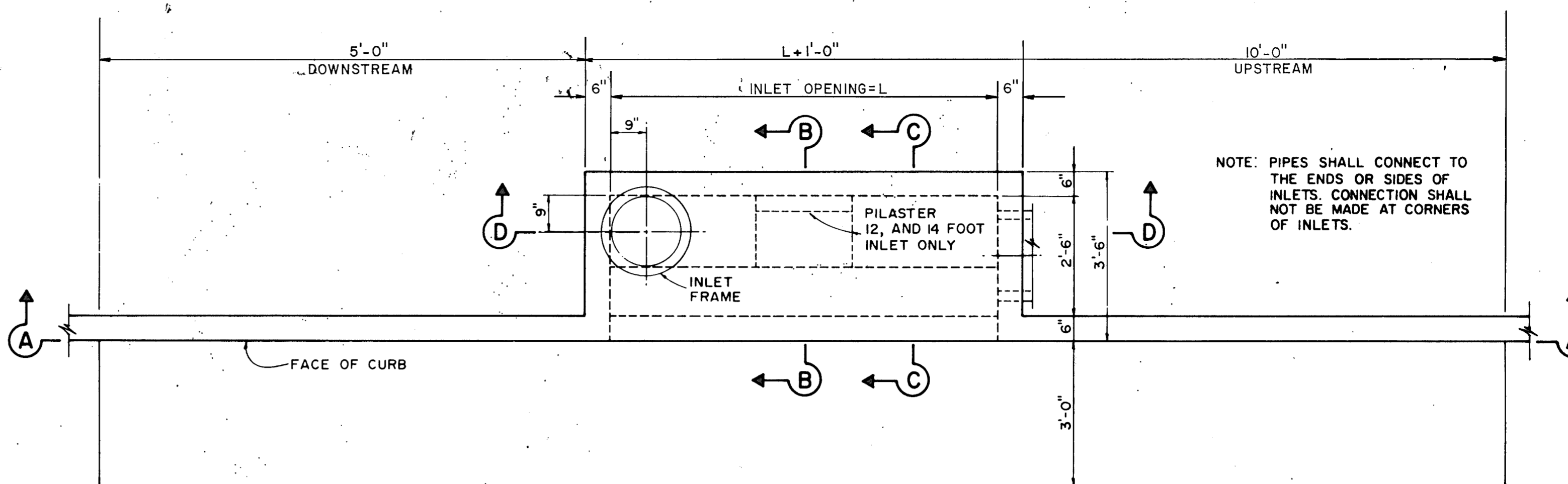
SECTION B-B DRIVEWAY RETURN DETAILS

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS DEPT. OF ENGINEERING STD. CONSTRUCTION DETAILS STORM SEWER & DRIVEWAY DETAILS GINN, INC. Consulting Engineers Dallas, Texas			
Designed - GINN	Drawn - GINN, INC.	Date - OCT., 1986	Job No. - 293
Approved - HWG	Checked - GINN, INC.	Scale - N/A	Sheet 9 OF 12

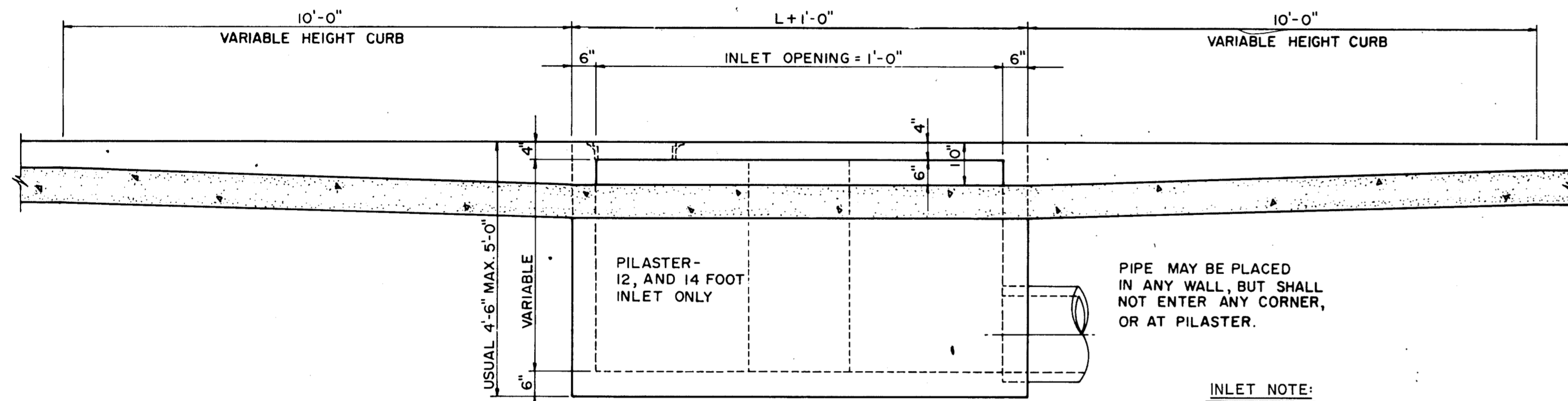
Randall C. Ginn
 4-14-87



PLAN - RECESSED INLET

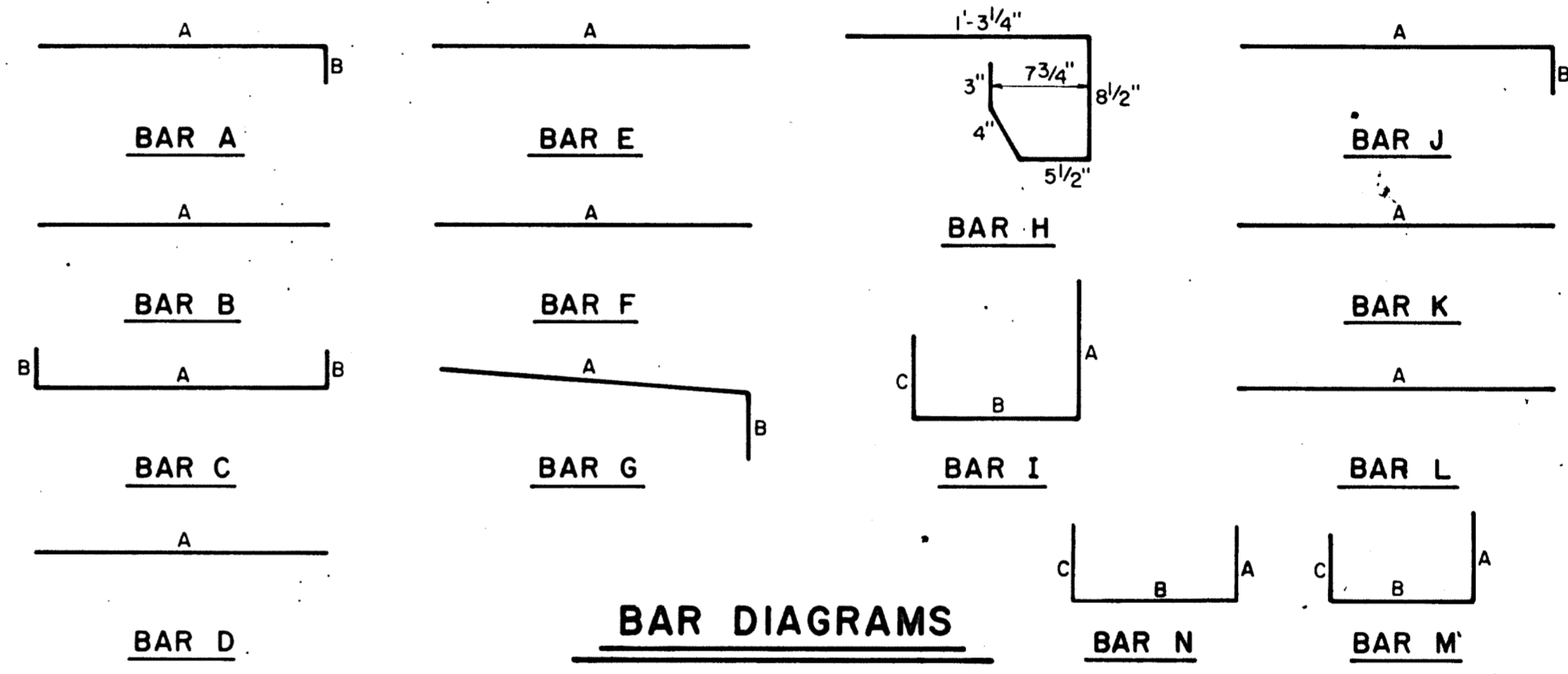


PLAN - STANDARD INLET



SECTION A-A-RECESSED AND STANDARD INLETS
4, 6, 8, 10, 12, AND 14 FOOT INLETS

INLET NOTE:
WHERE INLETS ARE INDICATED TO BE MODIFIED, REFER TO PLAN/PROFILE SHEETS FOR ELEV. DIFFERENT SIZES ON MODIFICATIONS. ALL OTHER ITEMS SHALL REMAIN AS SHOWN ON THIS STANDARD DETAIL SHEET.

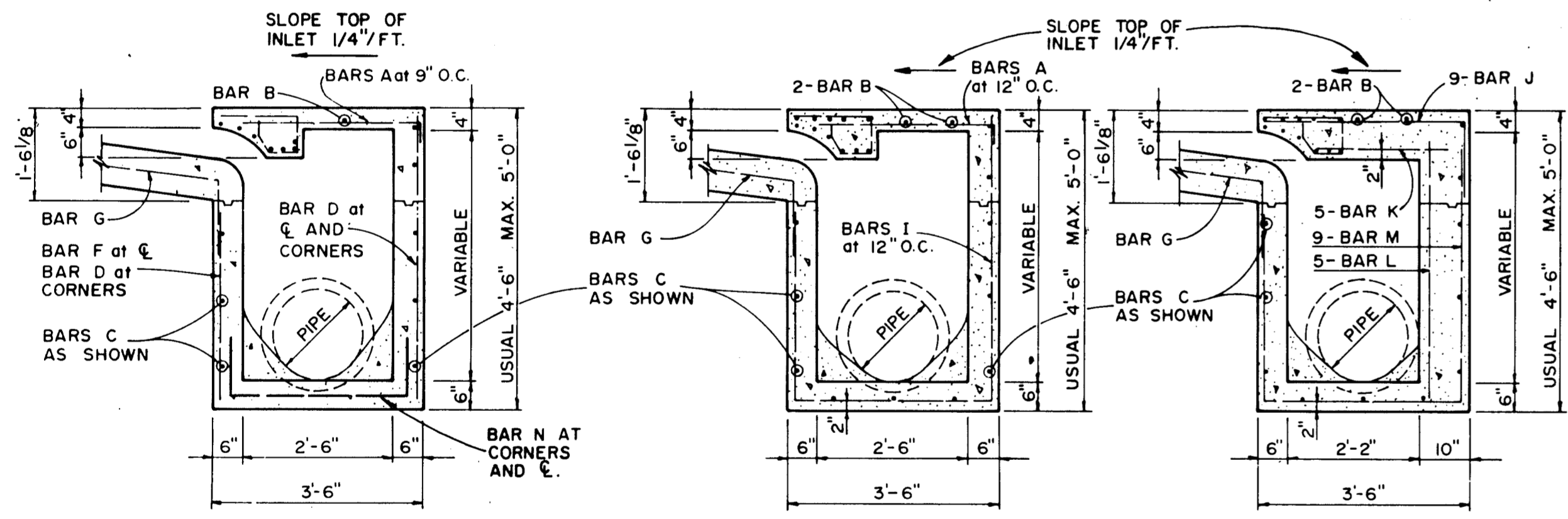


BAR DIAGRAMS

REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

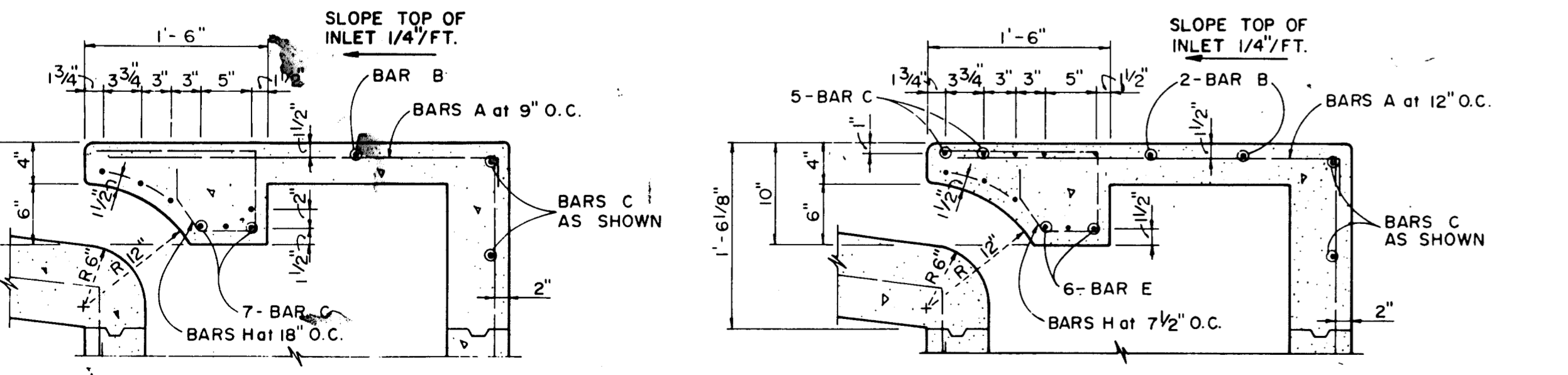
INLET LENGTH	BAR TYPE	BAR DIA. (1/8 IN.)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	-
	B	3	1	2'-10"	-	-
	C	4	15	4'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
8	A	3	12	3'-2"	0'-3"	-
	B	3	1	6'-10"	-	-
	C	4	15	8'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	4	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
10	A	3	10	3'-2"	0'-3"	-
	B	3	2	8'-10"	-	-
	C	4	16	10'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	10'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	15	*	*	*
	I	4	8	4'-8"	3'-2"	3'-2"
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"
12	A	3	12	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	12'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	12'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	18	*	*	*
	I	4	10	4'-8"	3'-2"	3'-2"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"
14	A	3	14	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	14'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	14'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	21	*	*	*
	I	4	12	4'-8"	3'-2"	3'-2"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"



SECTION B-B

SECTION C-C

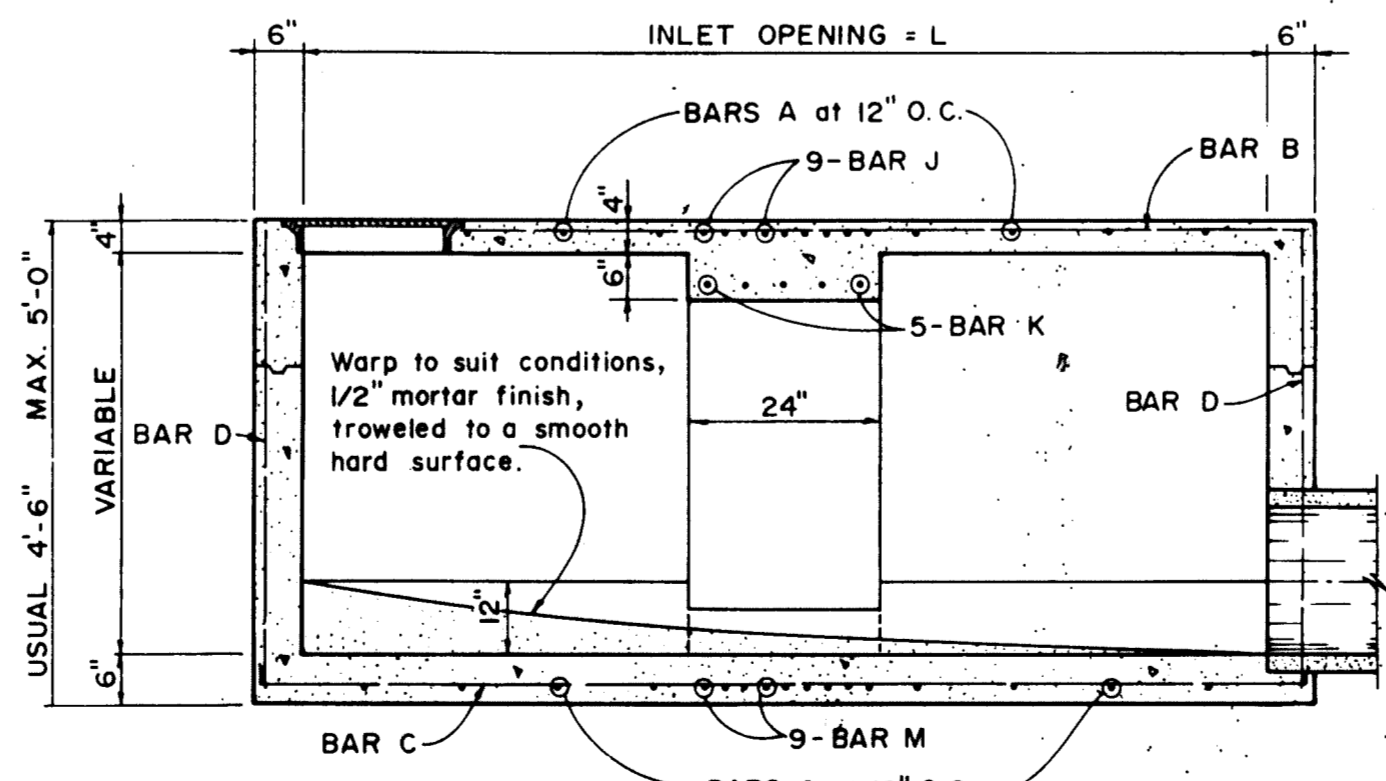
SECTION B-B



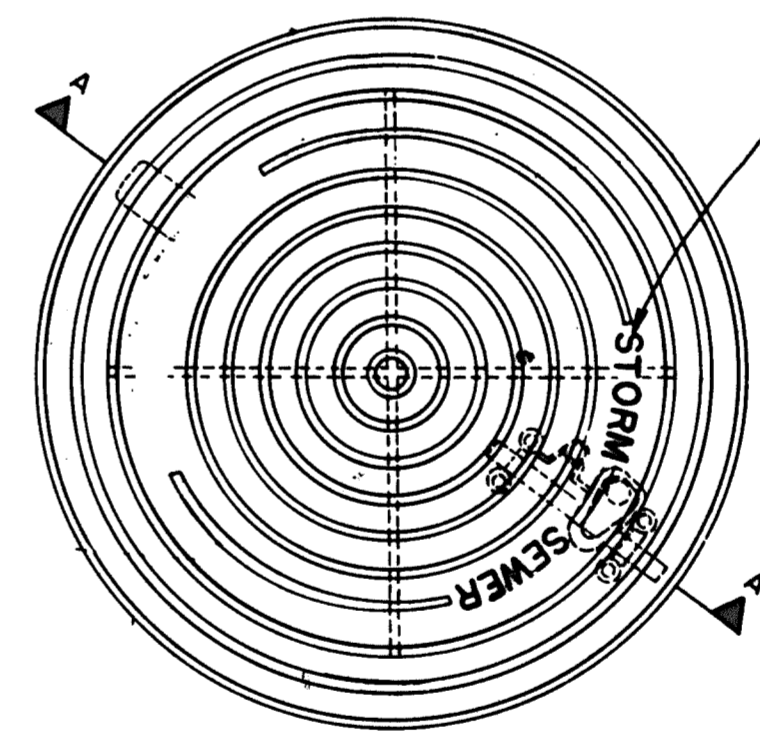
SECTION C-C

SECTION C-C

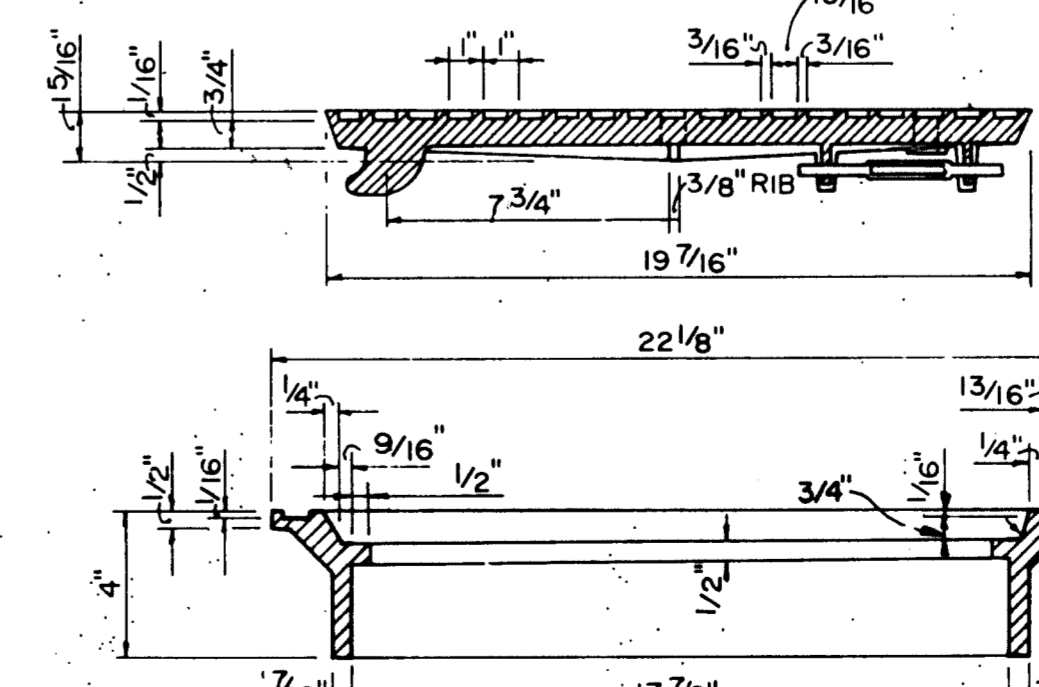
10, 12, AND 14 FOOT INLETS



SECTION D-D FOR 12' & 14' ONLY



PLAN OF FRAME



SECTION OF FRAME AND COVER

INLET FRAME AND COVER

NO.	REVISION	BY	DATE

TOWN OF ADDISON, TEXAS
DEPARTMENT OF ENGINEERING

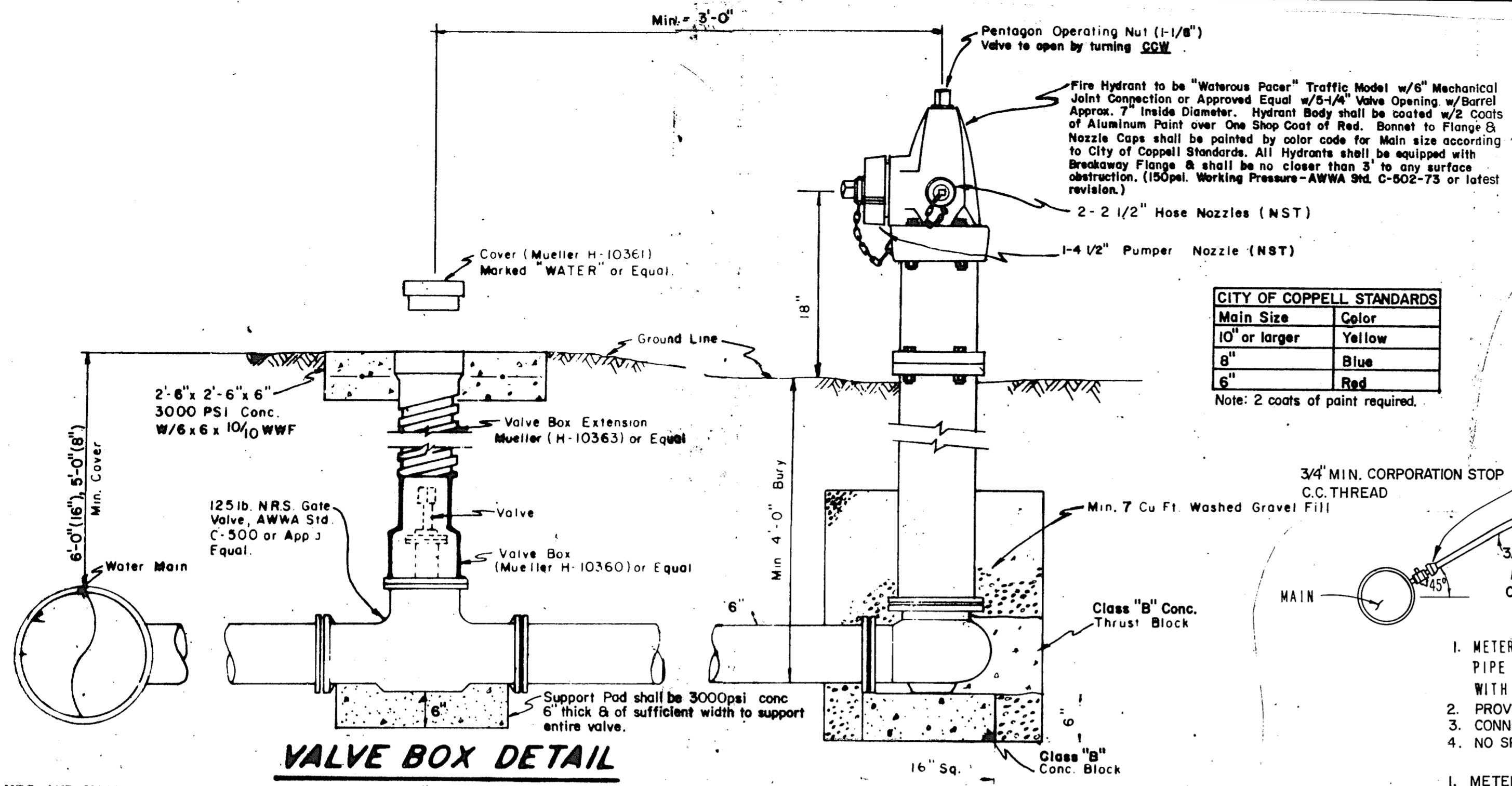
STANDARD CONSTRUCTION DETAILS
STORM DRAINAGE

CURB INLETS

APPROVED _____
H. WAYNE GINN, P.E.

DATE MARCH, 1984

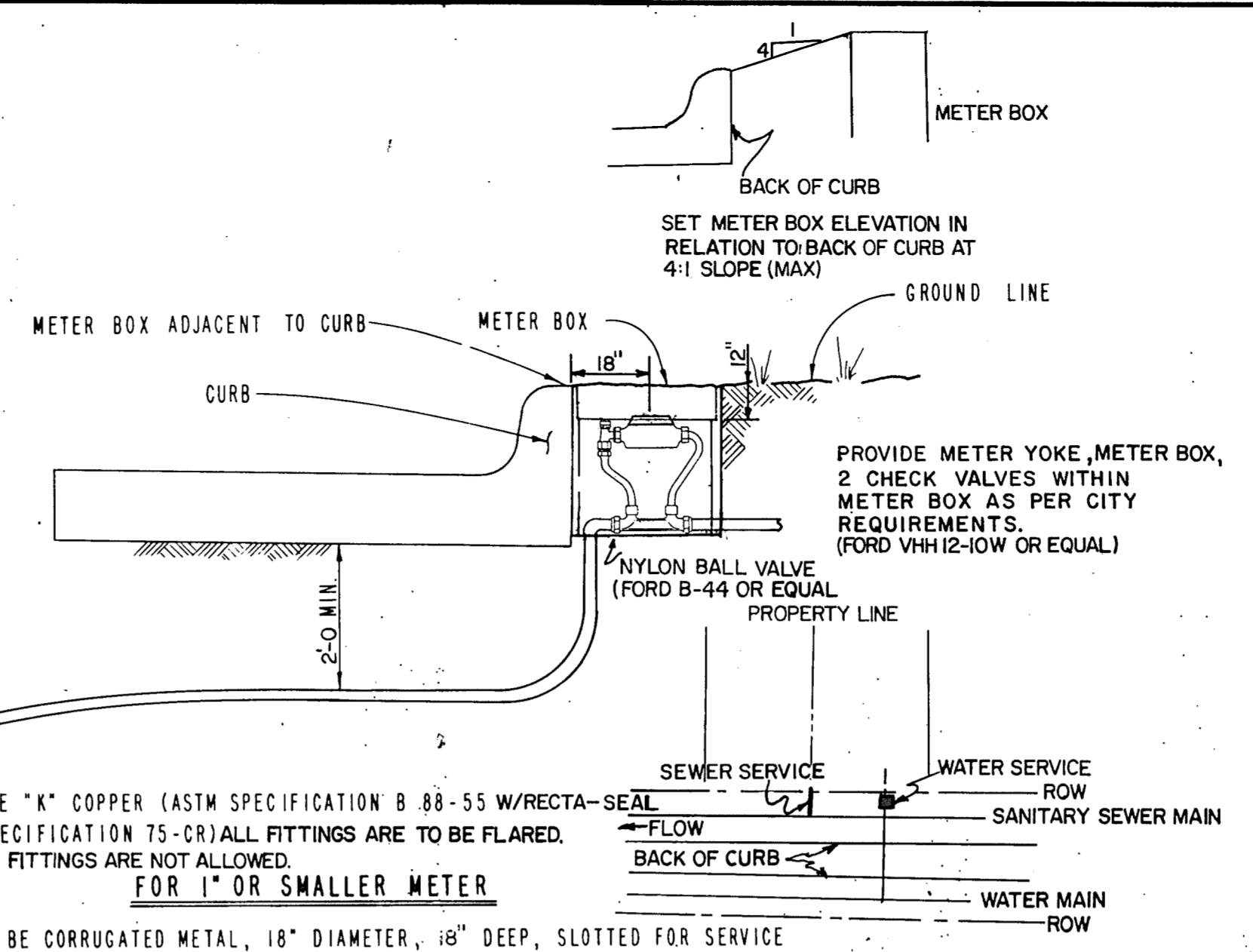
SHEET 10 of 12



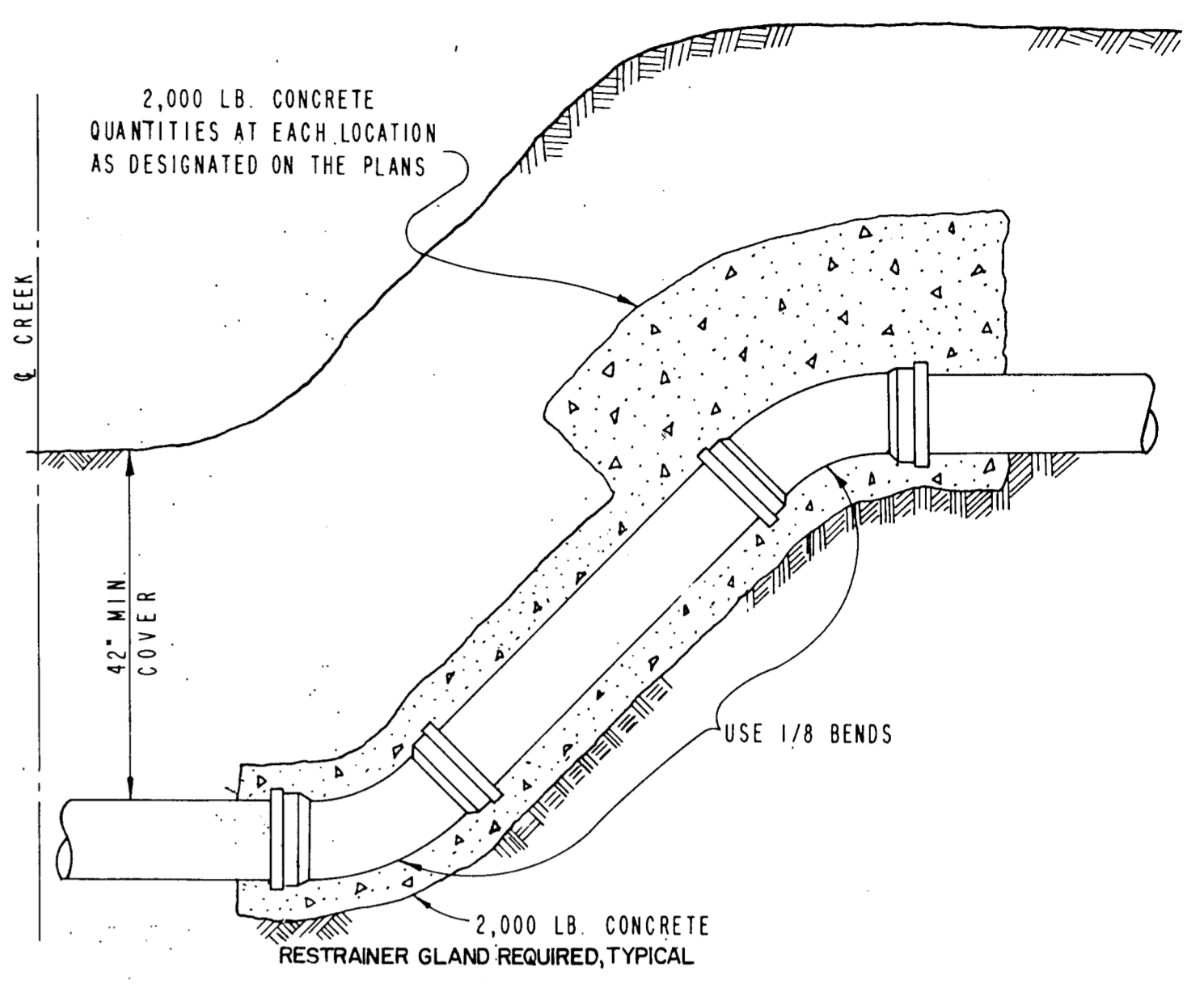
CITY OF COPPELL STANDARDS

Main Size	Color
10" or larger	Yellow
8"	Blue
6"	Red

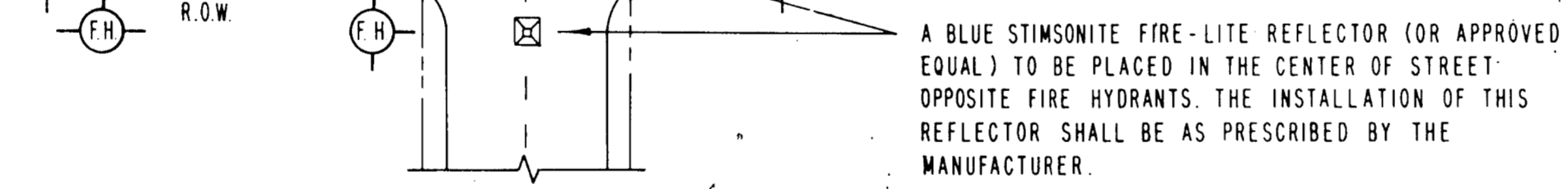
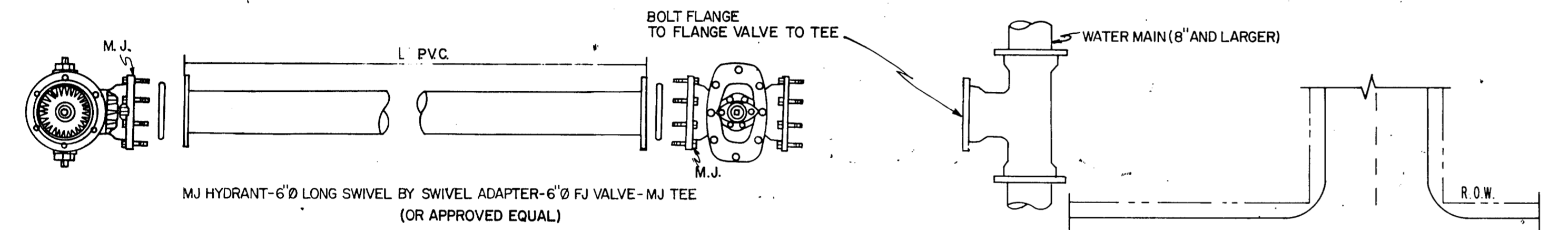
Note: 2 coats of paint required.



- METER BOX SHALL BE CORRUGATED METAL, 18" DIAMETER, 18" DEEP, SLOTTED FOR SERVICE PIPE FITTED WITH CAST IRON TOP AND LID. LID SHALL BE C.I. BASS & HAYS DOMESTIC MFG. LID WITH #3P HAIRPIN LOCK.
 - PROVIDE BRONZE TAPPING SADDLES - ALL WATER SERVICES - DBL. STRAP / SINGLE WIDE - UPPER BODY
 - CONNECTION TO WATER YOKE w/BRONZE NIPPLES w/ RECTRA SEAL.
 - NO SPLICES UNDER ROADWAY.
- FOR 2" OR LARGER**
- METER SETTERS FOLLOWED BY DBL. CHECK VALVES - (BACK FLOW PREVENTER) AS TO CITY OF COPPELL STDS.
 - HOUSED IN SEPARATE BOX.



- GATE VALVES AND VALVE BOXES:** (See Plans for "Main Size")
- Gate valves shall be iron body, bronze or brass mounted, non-rising stem, parallel seat type. Valves shall be of equal or greater pressure class than the piping in which they are to be installed.
 - Valve boxes shall be cast iron and shall be of sufficient length and diameter to operate all valves buried in the ground. Covers shall be marked "Water." The boxes shall rest on the valve and be adjusted so that the cover may be set flush with the finished grade.

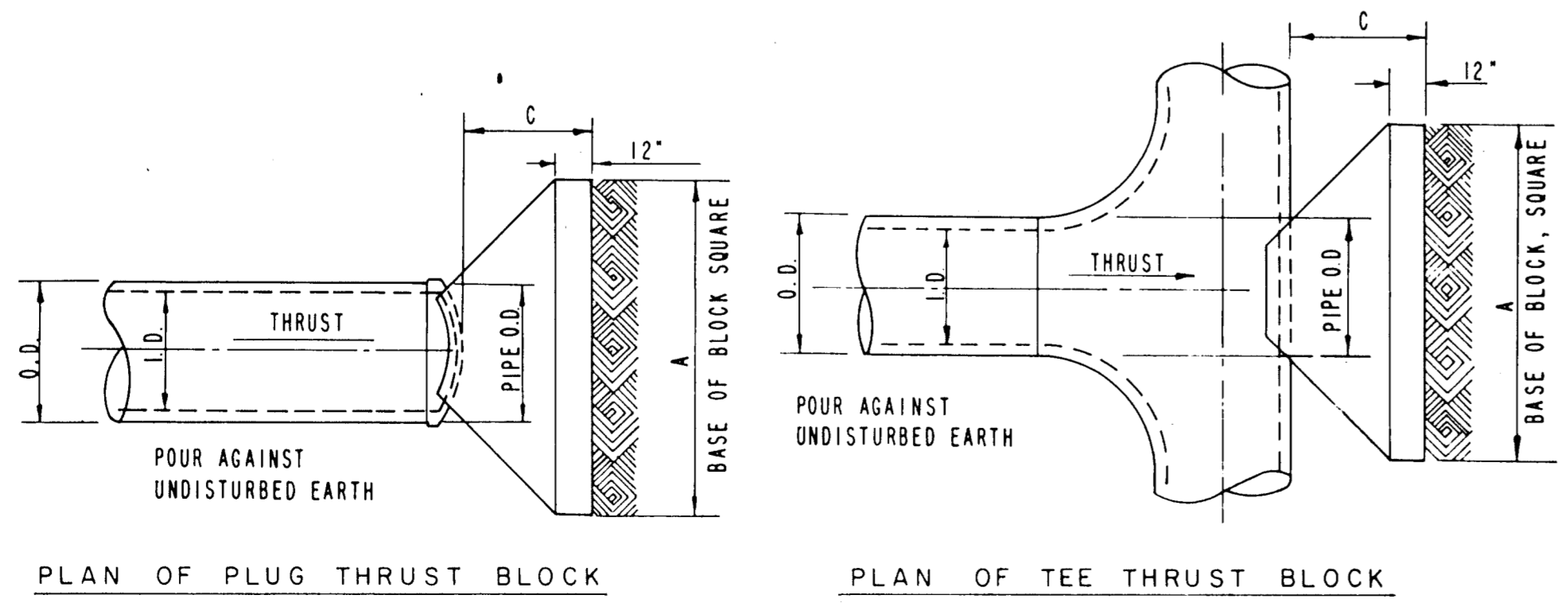


THRUST IN TONS FOR VERTICAL BENDS

I.D. IN INCHES	11.25°	15°	22.50°	30°	45°	60°	75°	90°
12								
14								
16	2.94	3.90	5.78	7.54	10.66	13.06	14.56	15.08
18	3.72	4.94	7.30	9.54	13.50	16.52	18.42	19.08
20	4.60	6.10	9.02	11.78	16.66	20.40	22.76	23.56
24	6.62	8.78	12.98	16.96	23.98	29.38	32.76	33.92
30	10.34	13.72	20.28	26.52	37.50	45.92	51.22	53.02

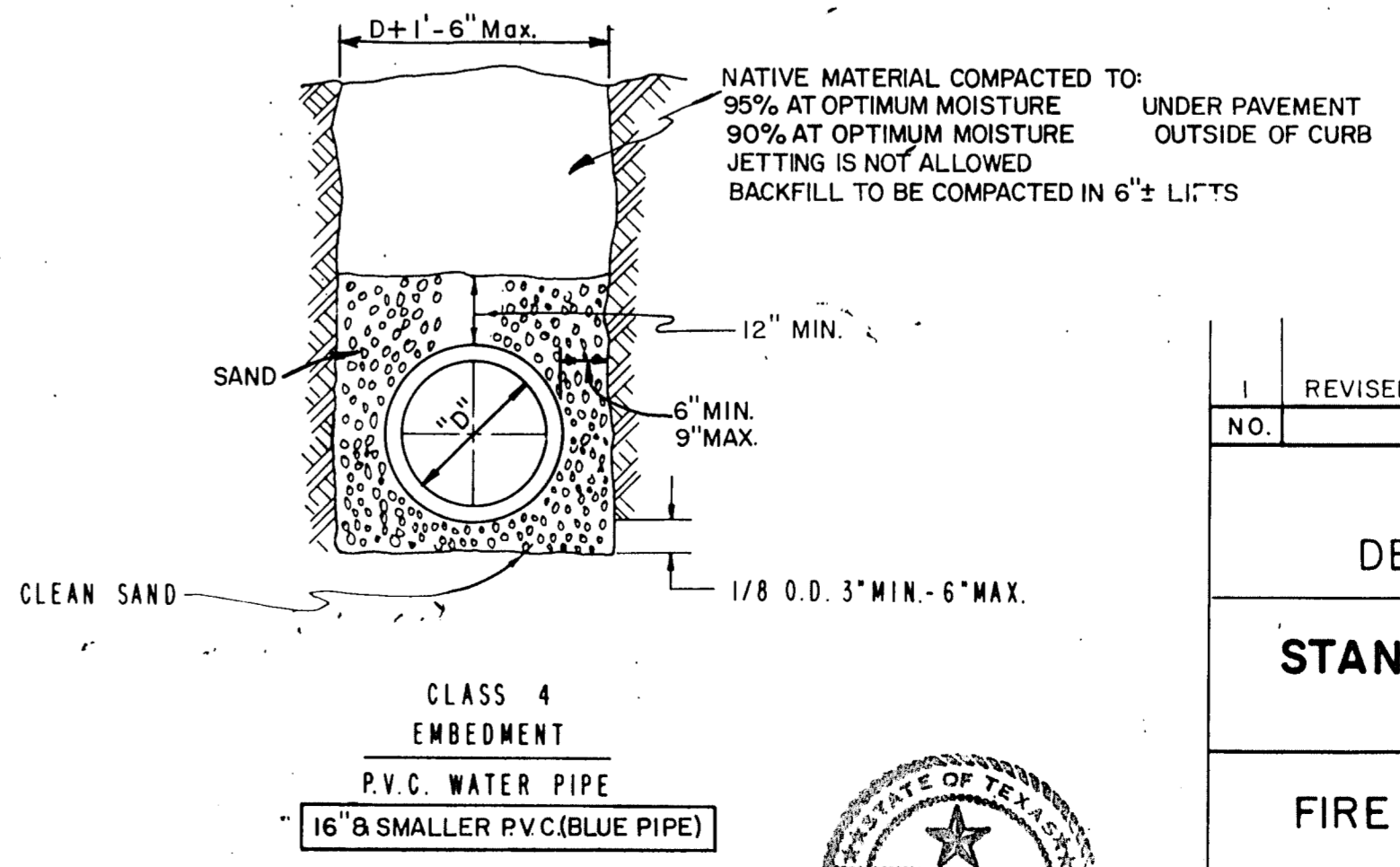
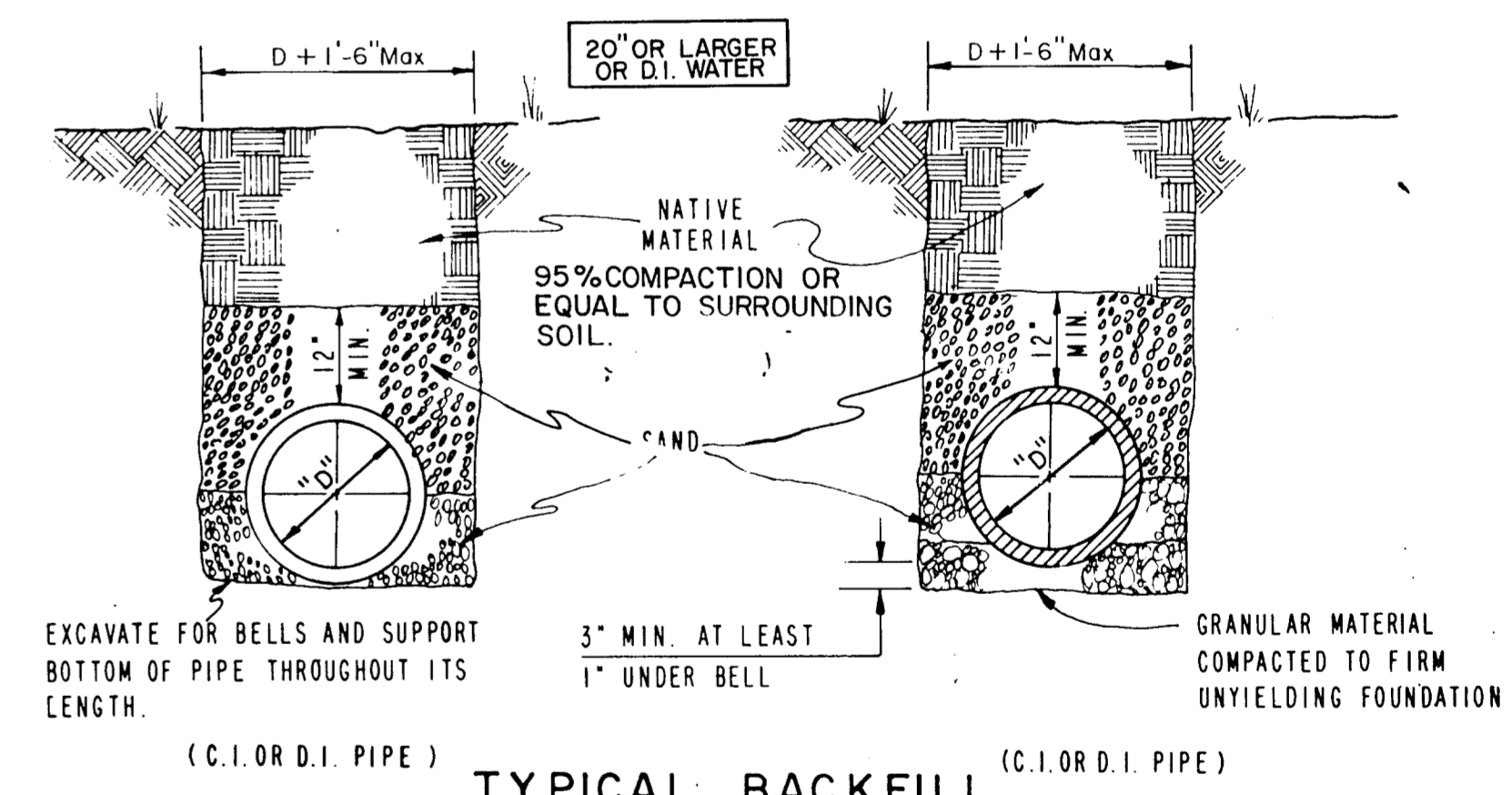
TEES & PLUGS

I.D. UNIT	A FT.	C FT.	THRUST TONS
12"			
14"			
16"	3.87	1.57	15.08
18"	4.37	1.77	19.09
20"	4.86	1.97	23.56
24"	5.82	2.36	33.93
30"	7.28	2.95	53.01



TYPICAL PLUG & TEE THRUST BLOCKS

- GENERAL NOTES:**
- ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.
 - ALLOWABLE SOIL BEARING PRESSURES MUST BE AT LEAST ONE TON PER SQUARE FOOT FOR THE THRUST BLOCKS SHOWN. IN SOILS OF LESSER CAPACITY, INCREASE SIZE AND BEARING AREA PROPORTIONATELY. VOLUMES OF VERTICAL BEND THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED, AND THE CORRESPONDING WEIGHT OF THE CONCRETE (AT 4,000#/C.Y.) EQUALS THE VERTICAL COMPONENT OF THRUST ON THE VERTICAL BEND. ALL BEARING SURFACES OF THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
 - CONCRETE FOR BLOCKING SHALL BE 2,000 CONCRETE
 - DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER, BUT SHALL NOT BE LESS THAN THE DIMENSIONS SHOWN HERE
 - FOR WATER MAINS 10" AND LARGER SDR 16 PVC PIPE IS ALLOWED, FOR 8" WATER MAINS SDR 14 PVC IS REQUIRED. ALL WATER PIPE (PVC) IS TO BE FORMED WITH INTEGRAL BELLS AND BLUE IN COLOR.
 - ALL DEGREE BENDS IN WATER MAINS SHALL HAVE RESTRAINER GLANDS AND THRUST BLOCKS.
 - ALL COMPOUND DUCTILE IRON FITTINGS SHALL BE BY TYLER, TRINITY VALLEY, NAPLO, OR APPROVED EQUAL. NO CAST IRON FITTINGS.
 - BRASS FITTINGS SHALL BE BY MUELLER, FORD, JONES, OR APPROVED EQUAL.



NO.	REVISION	BY	DATE
1	REVISED	S.D.H.	10-8-85

TOWN OF ADDISON
DEPARTMENT OF ENGINEERING

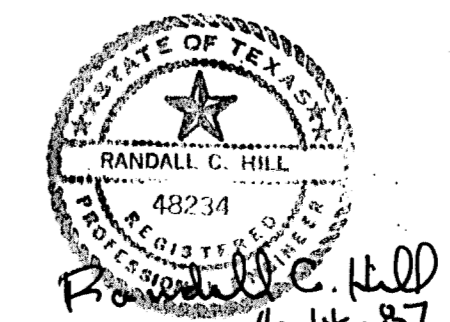
STANDARD CONSTRUCTION DETAILS
WATER

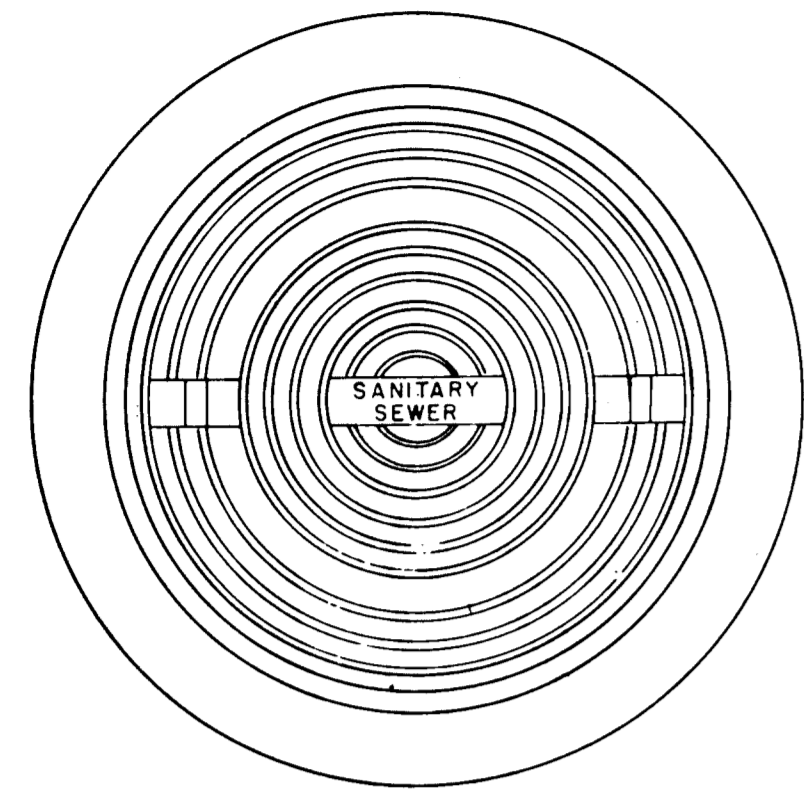
FIRE HYDRANT - SERVICE CONNECTION

APPROVED _____
H. WAYNE GINN, P.E.

DATE: MARCH, 1984

SHEET SD-16

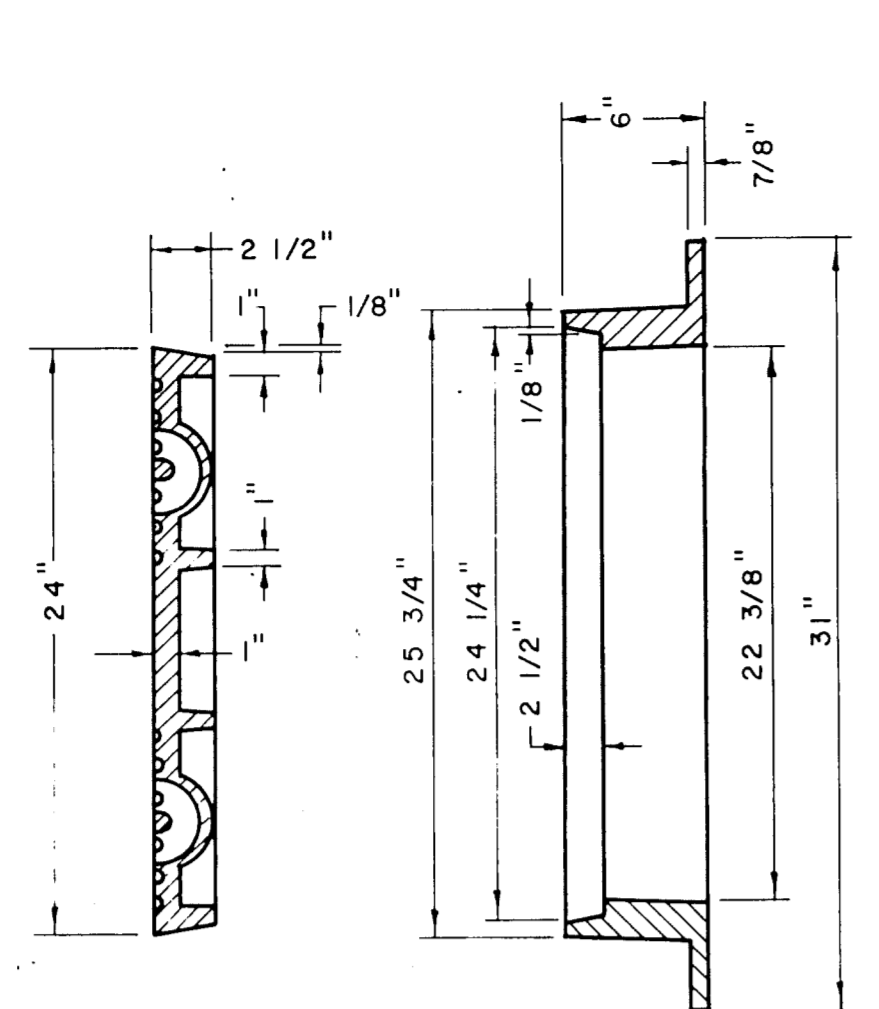




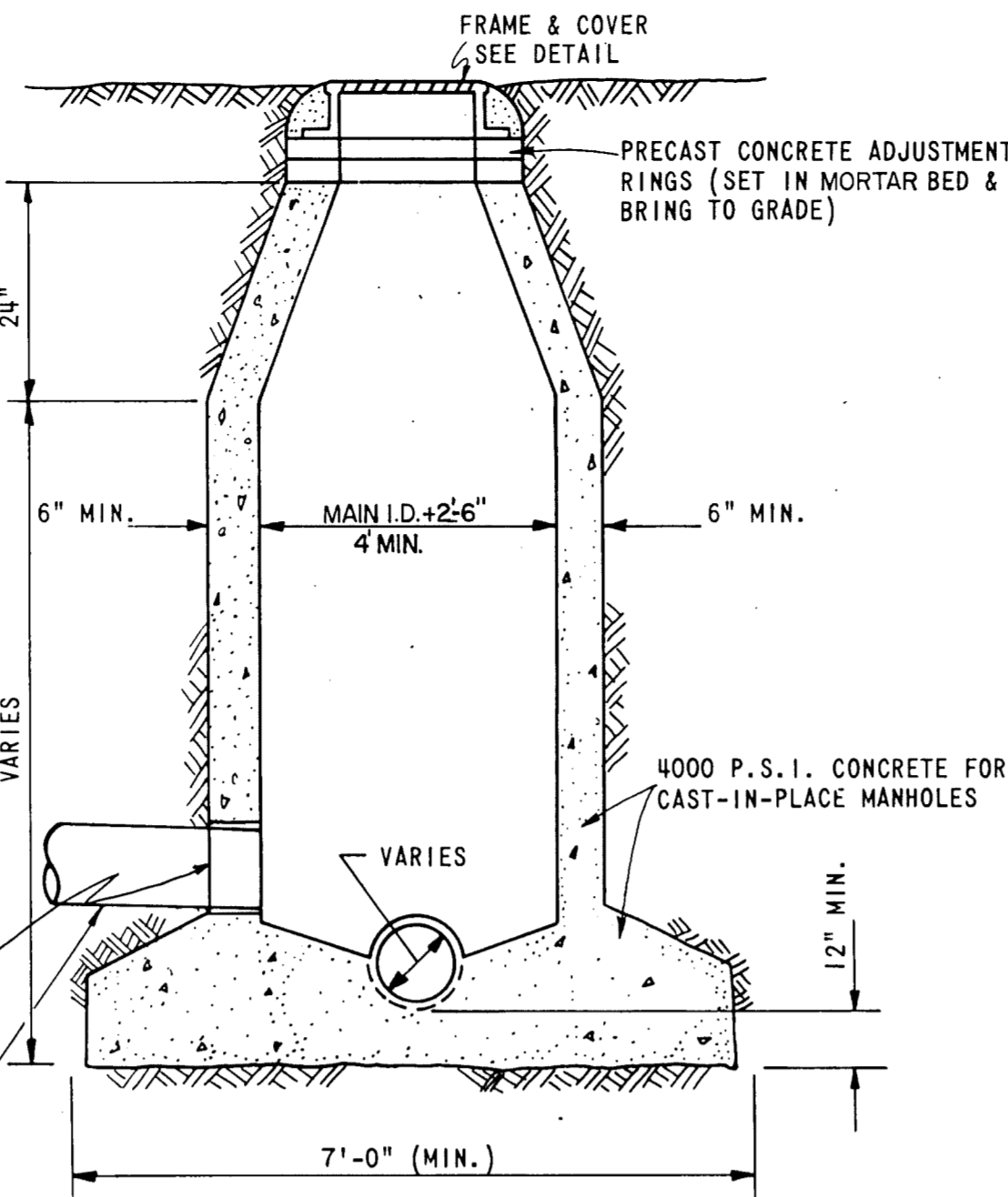
APPROX.
WEIGHT
RING AND COVER
385 LBS.

CAST IRON GRATE AND FRAME DETAIL

PROVIDE WITH PICK SLOTS ONLY



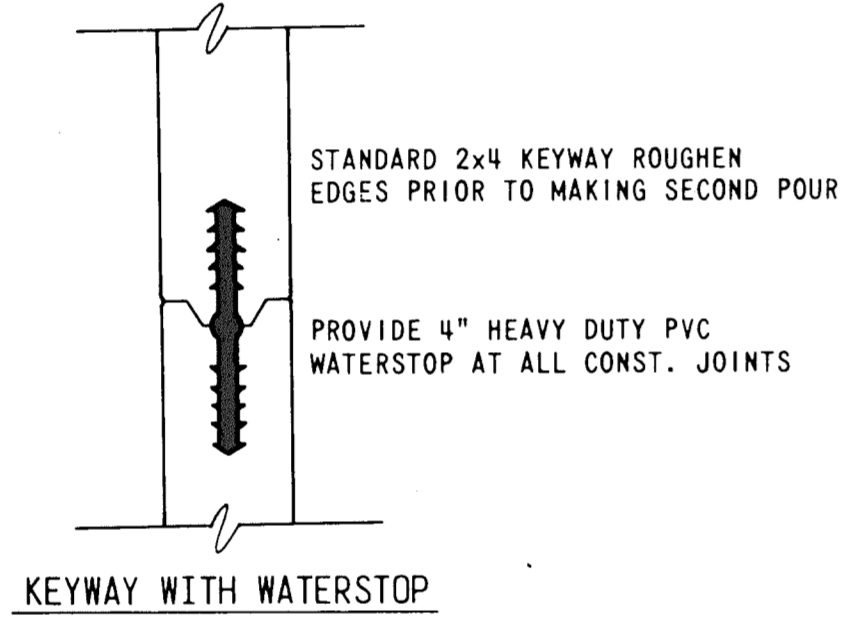
STUBOUTS TO BE A MINIMUM OF
5' LONG WITH CONC. CRADLE
UNDER ENTIRE LENGTH



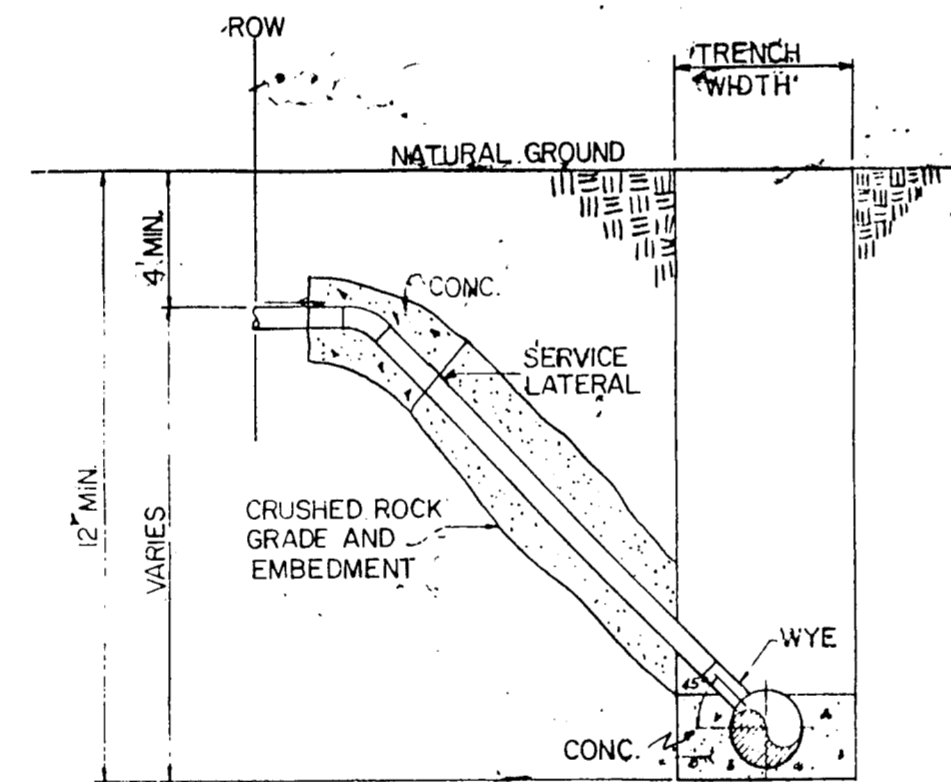
STANDARD CAST IN PLACE MANHOLE

CAST-IN-PLACE NOTES:

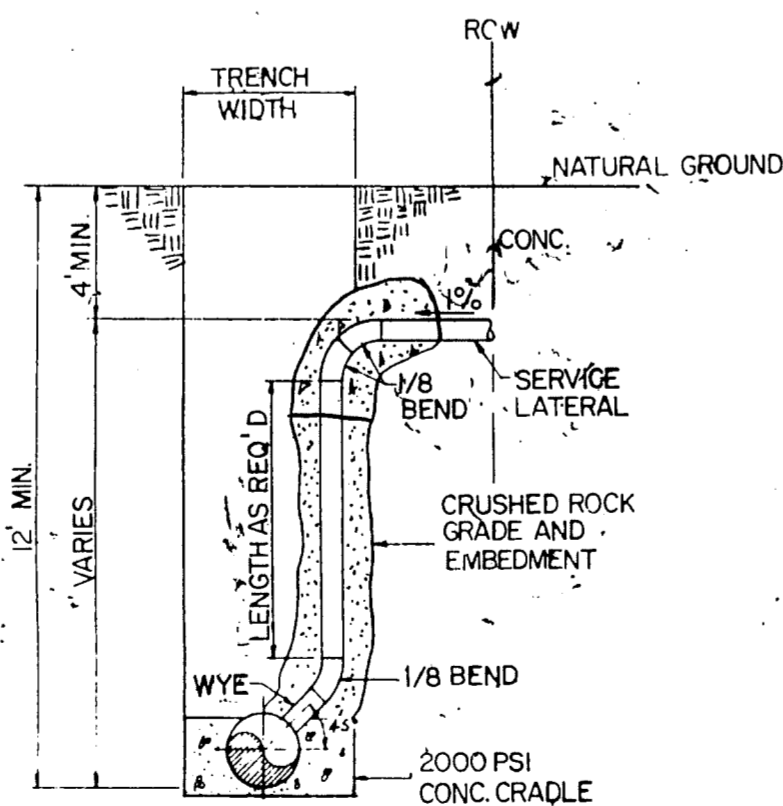
1. KEYWAYS REQUIRED FOR ALL CONSTRUCTION JOINTS.
2. P.V.C. WATER STOP REQUIRED FOR ALL JOINTS IN LOWER 4'-0" OF MANHOLES.
3. CONCRETE SHALL BE 4000 P.S.I.
4. 4' DIAMETER MANHOLE TO HAVE 7" BASE
5-6' DIAMETER MANHOLE TO HAVE 9" BASE



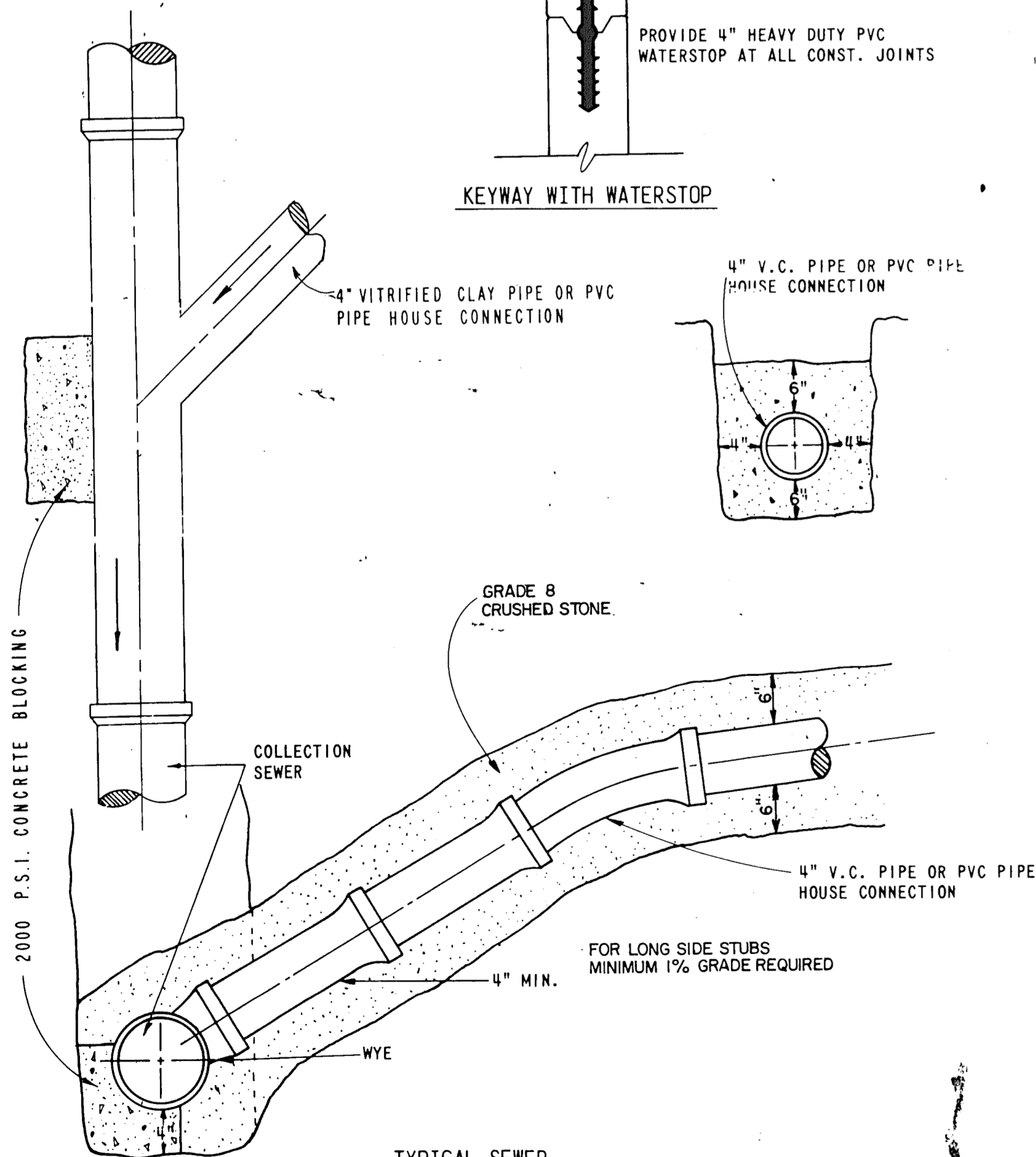
KEYWAY WITH WATERSTOP



**LONG SIDE ONLY
EXTRA DEPTH
SEWER CONNECTION**

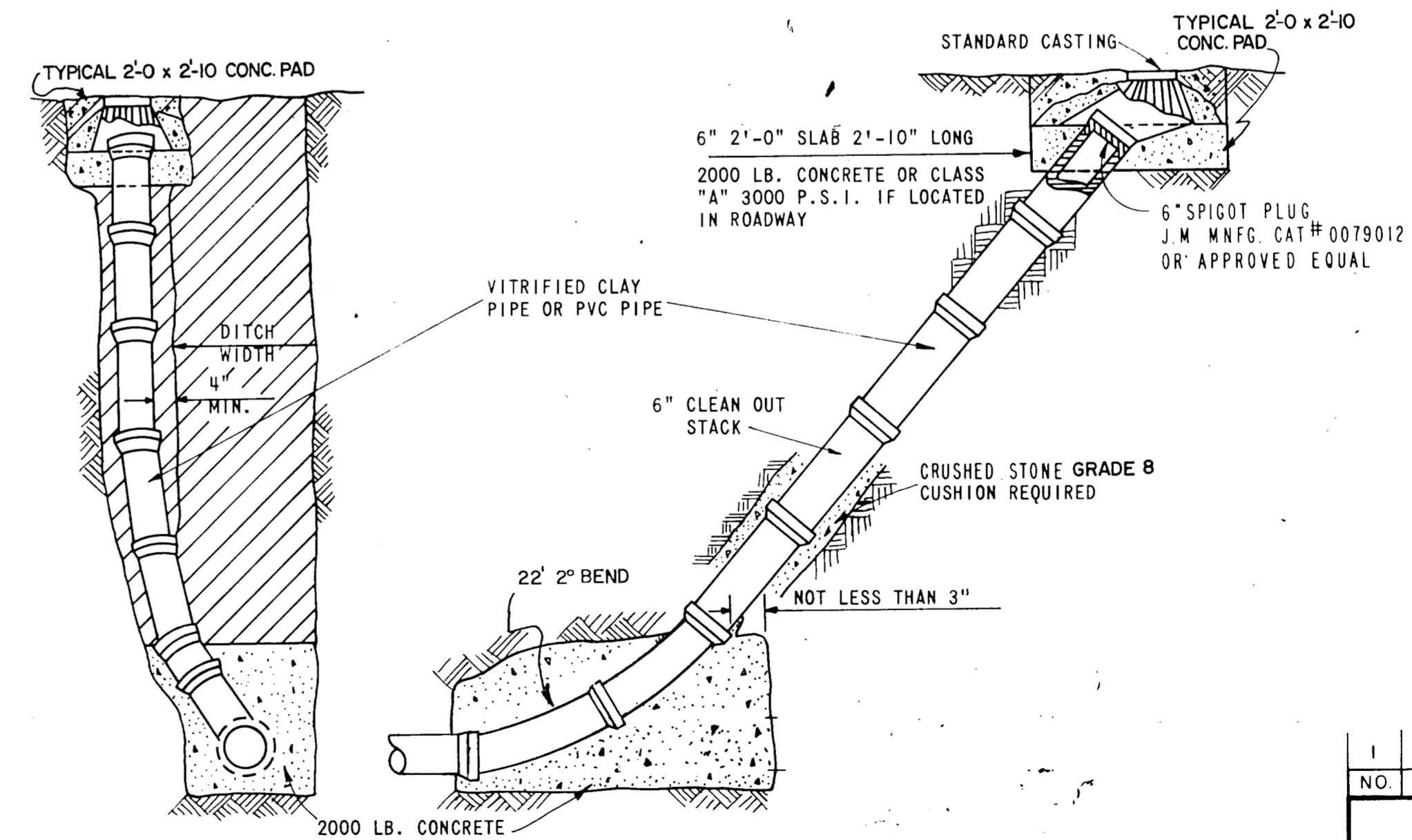


**SHORT SIDE OR LONG SIDE
EXTRA DEPTH
SEWER CONNECTION**



**TYPICAL SEWER
HOUSE SERVICE CONNECTION**

N.T.S.



STANDARD CLEANOUT

N.T.S.

ALL PVC SANITARY SEWER PIPE TO BE SDR 35 GREEN IN COLOR WITH INTEGRAL BELL. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE HORIZONTALLY EACH 4' SERVICE IN RELATION TO THE SANITARY SEWER STATIONING. RECORD ON 'AS BUILTS' FIELD TIES ARE TO BE INCLUDED AND RECORDED ON ALUMINIZED SANITARY SEWER TAPE. THIS TAPE, GREEN OR RED IN COLOR, IS TO BE ATTACHED TO THE 4' SERVICE AT THE ROW LINE AND BROUGHT TO THE SURFACE TO BE USED AS A PERMANENT MARKER.

NO	REVISED	REVISION	BY	S.D.H.	10-8-85
----	---------	----------	----	--------	---------

TOWN OF ADDISON
DEPARTMENT OF ENGINEERING
STANDARD CONSTRUCTION DETAILS
SANITARY SEWER
MANHOLE - CLEANOUT - CONNECTIONS

APPROVED _____ H. WAYNE GINN, P.E.

DATE MARCH, 1984 SHEET SD-19

