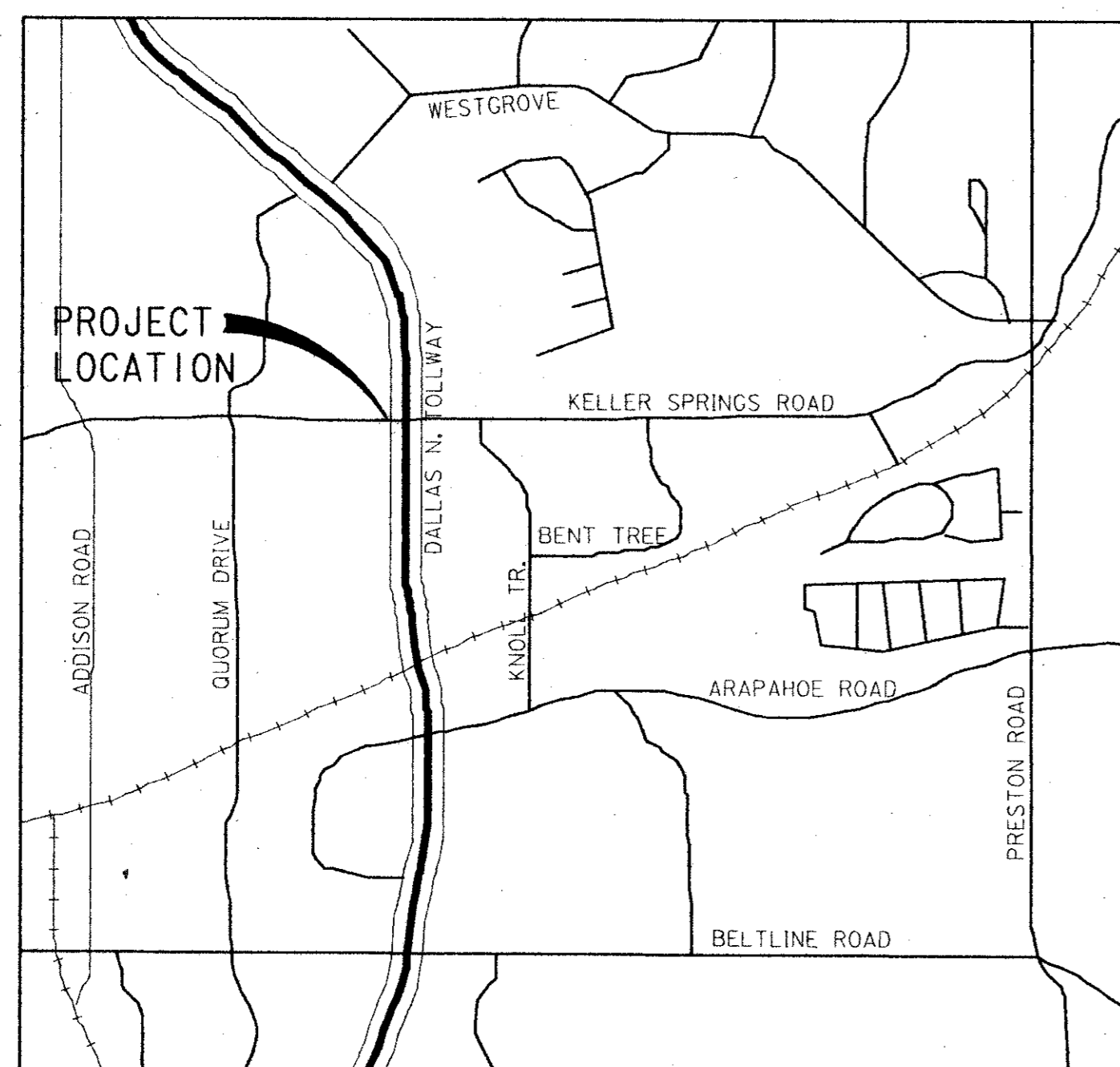


# TOWN OF ADDISON

## KELLER SPRINGS ROAD - DALLAS NORTH TOLLWAY INTERSECTION IMPROVEMENTS



LOCATION MAP  
N. T. S.



### INDEX

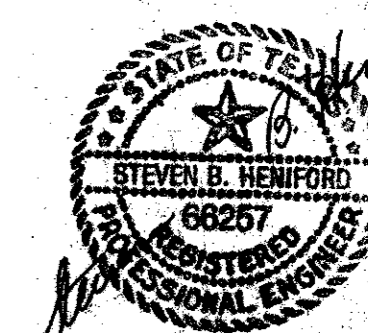
- 1 COVER SHEET
- 2 TYPICAL SECTION
- 3 TRAFFIC CONTROL PLAN
- 4 RIGHT OF WAY PLAN
- 5 PLAN AND PROFILE
- 6 PLAN AND PROFILE
- 7 UTILITY LAYOUT
- 8 SIGNING & STRIPING PLAN
- 9 MISCELLANEOUS DETAILS
- 10 INLET DETAILS
- 11 SIDEWALK & RAMP DETAILS
- 12 EMBEDMENT DETAILS
- 13 WATER DETAILS
- 14 FIRE HYDRANT & VALVE DETAILS

### LANDSCAPING

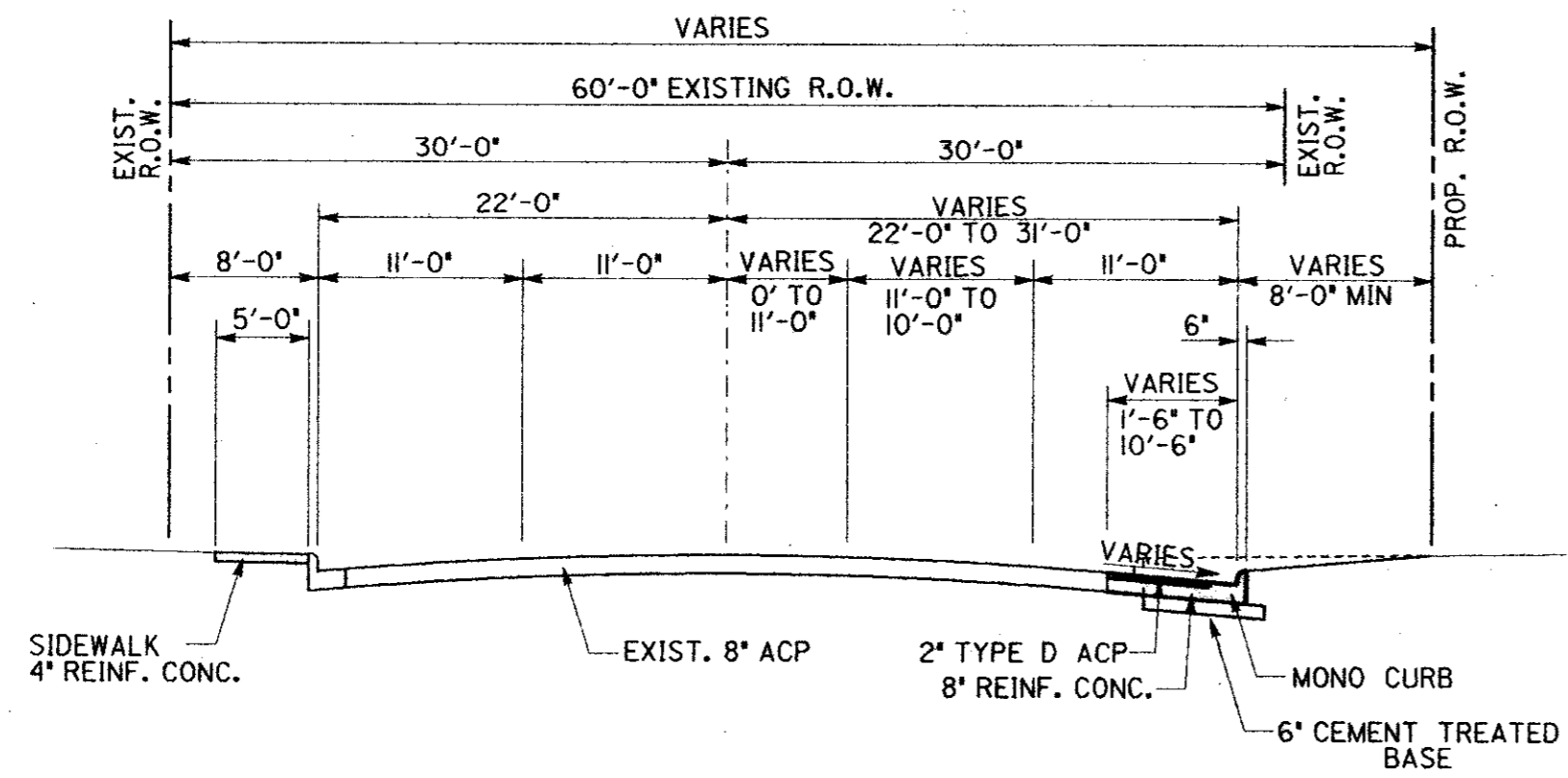
- 1 LANDSCAPING PLAN
- 2 IRRIGATION DETAILS

**RUST LICHLITER/JAMESON**

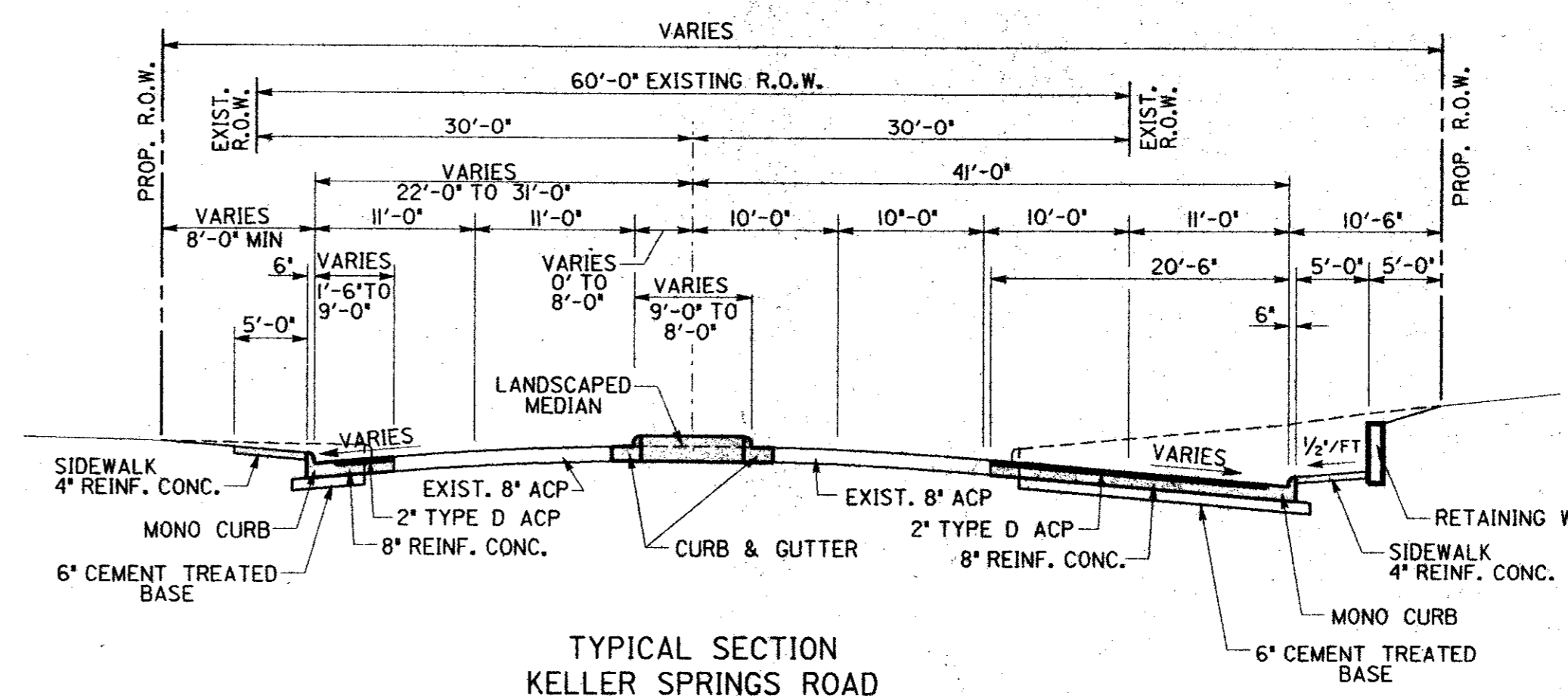
Environment & Infrastructure  
Consulting Engineers, Scientists and Planners  
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247-4906



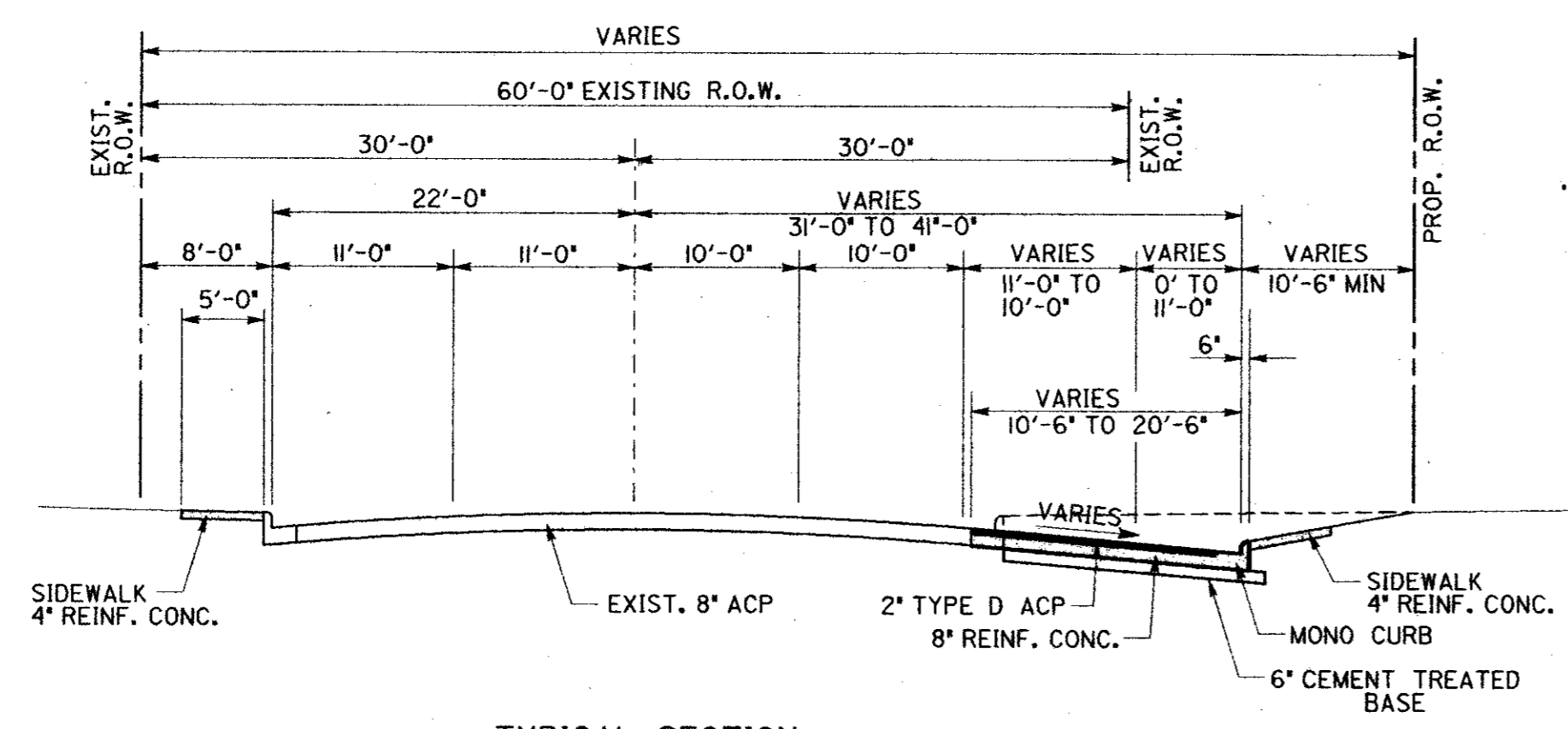
AGC Plan Room  
# 1023 - Dec 1 12:30 PM '95



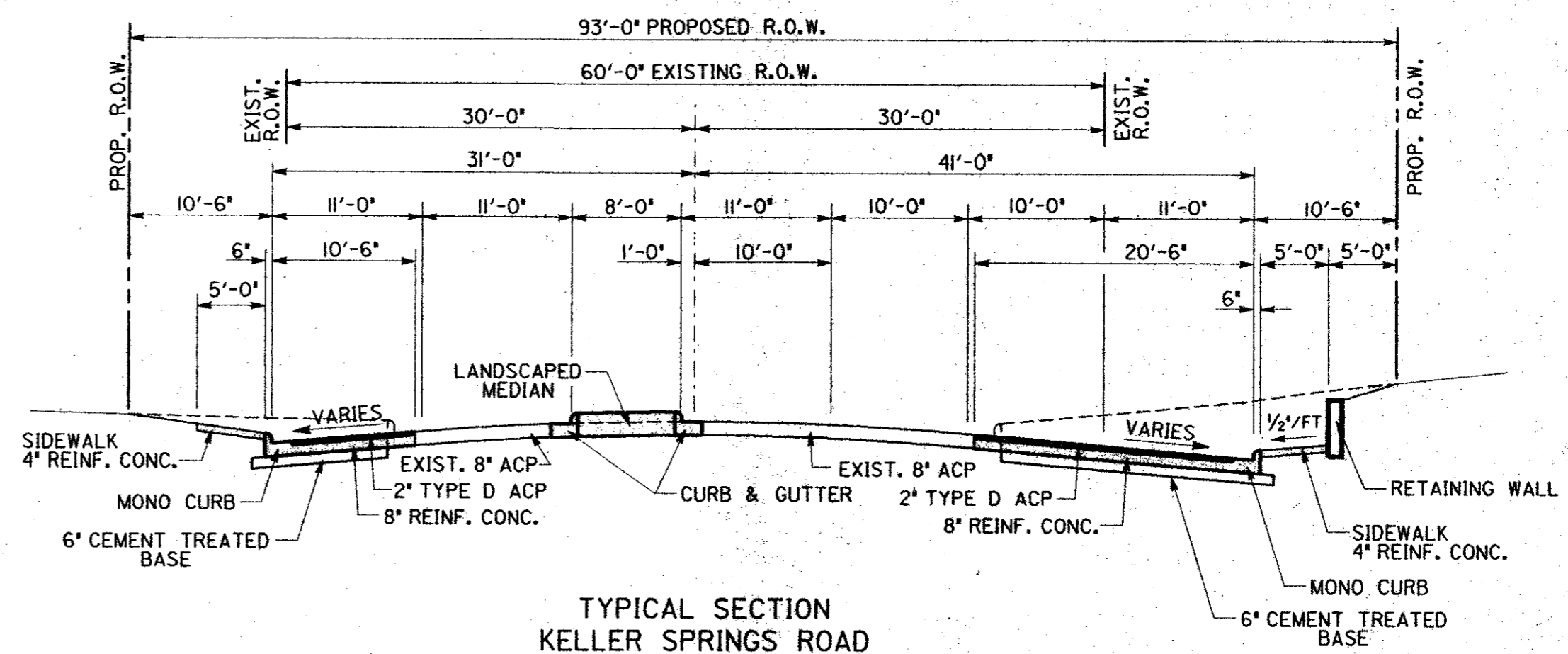
TYPICAL SECTION  
KELLER SPRINGS ROAD  
STA 18+72.88 TO STA 20+60.00



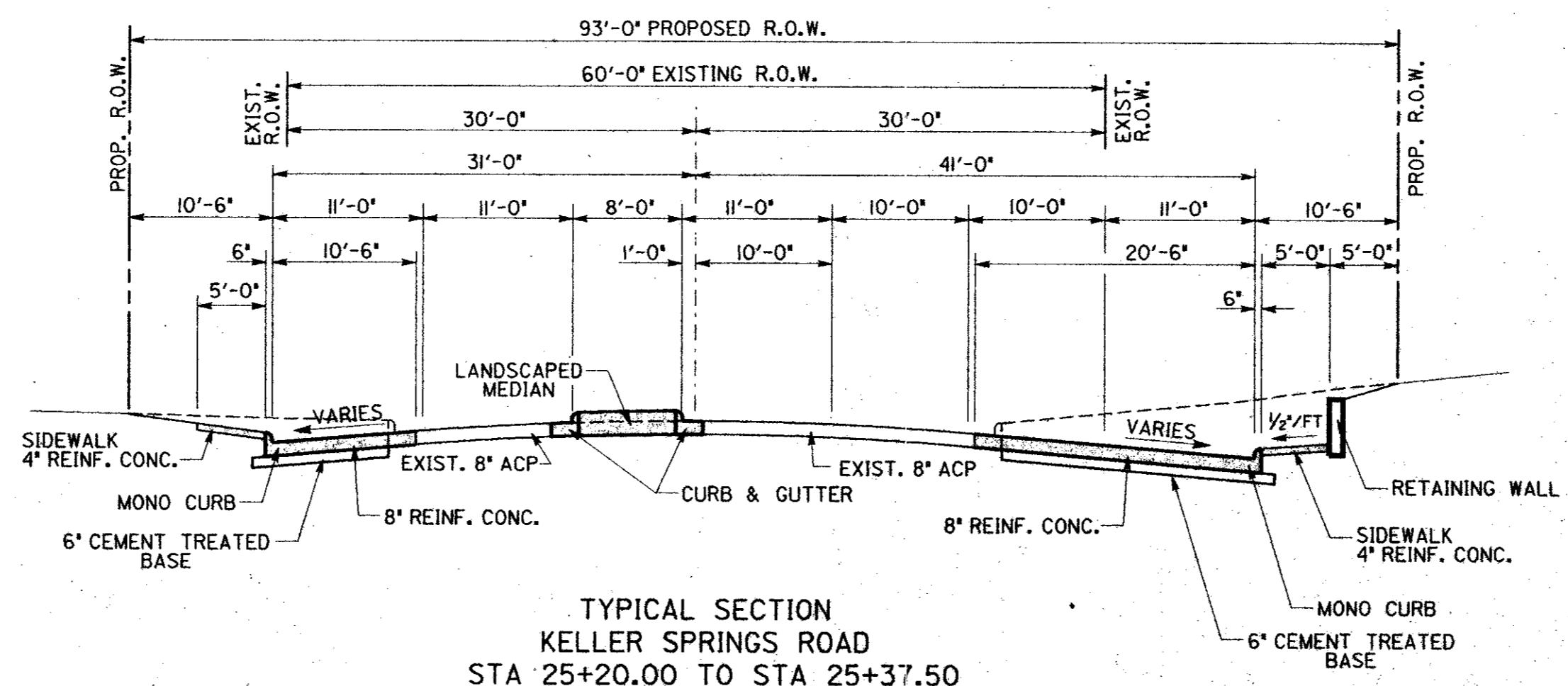
TYPICAL SECTION  
KELLER SPRINGS ROAD  
STA 22+51.22 TO STA 24+26.18



TYPICAL SECTION  
KELLER SPRINGS ROAD  
STA 20+60.00 TO STA 22+51.22

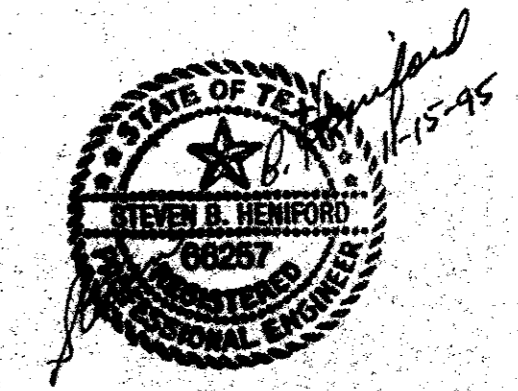


TYPICAL SECTION  
KELLER SPRINGS ROAD  
STA 24+26.18 TO STA 25+20.00



TYPICAL SECTION  
KELLER SPRINGS ROAD  
STA 25+20.00 TO STA 25+37.50

- GENERAL NOTES:
1. STREET CONCRETE IS TO BE 3600 p.s.i.
  2. C.T.B. IS TO BE CLASS A, 400 p.s.i. AT SEVEN DAYS.
  3. SIDEWALK CONCRETE IS TO BE 3000 p.s.i.



**KELLER SPRINGS ROAD  
NORTH DALLAS TOLLWAY  
INTERSECTION IMPROVEMENTS  
TYPICAL SECTIONS**

TOWN OF ADDISON, TEXAS

**JUST LICHLITER/JAMESON**

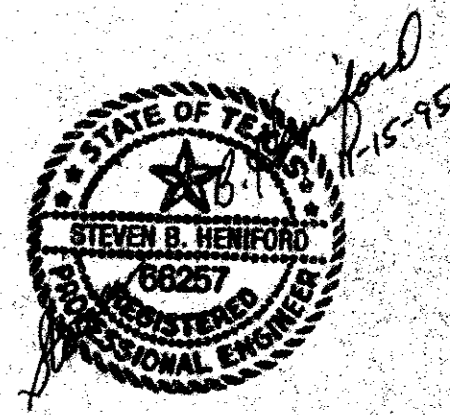
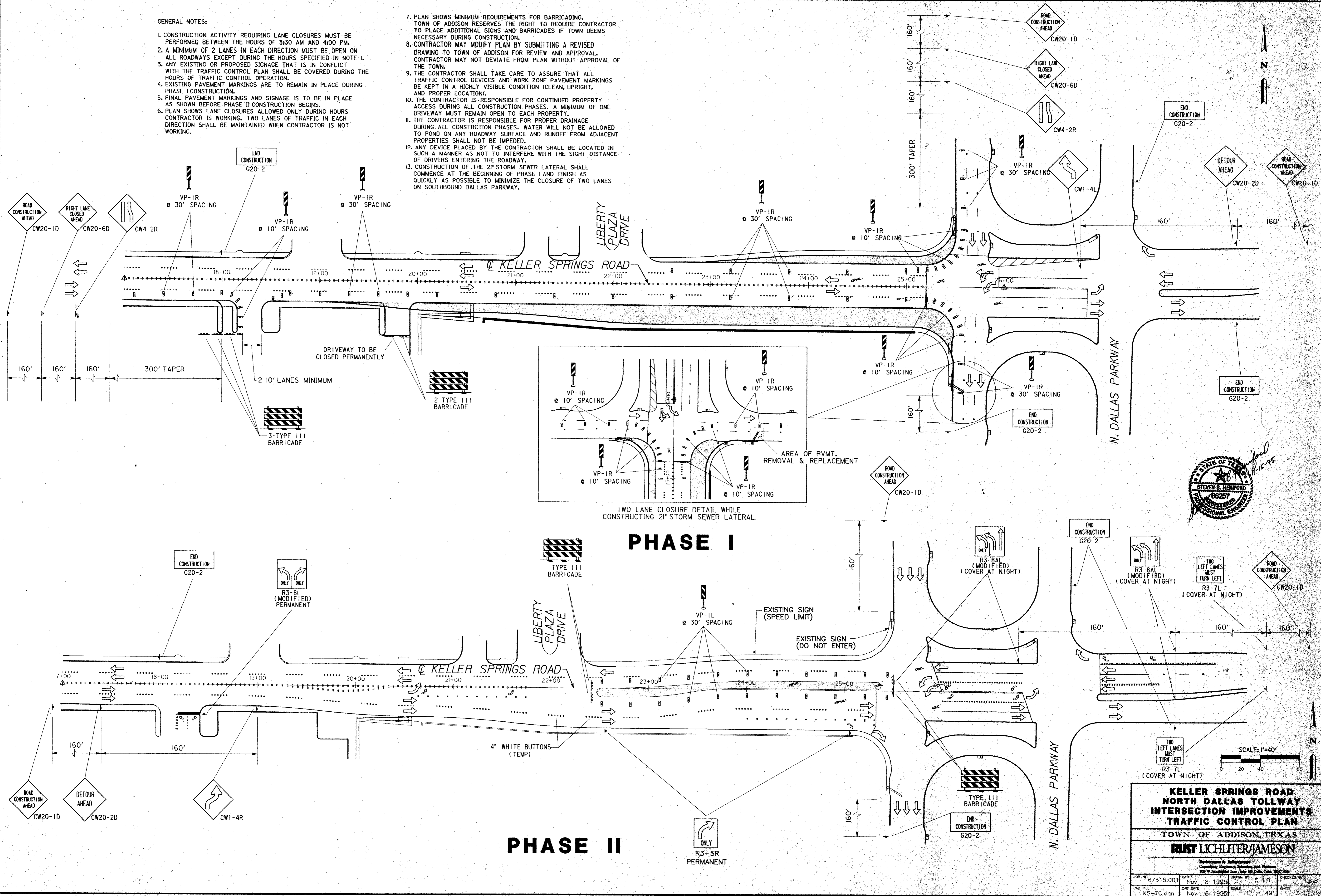
Engineering & Infrastructure  
Consulting Engineers, Scientists and Planners  
400 W. McDougal Ave., Suite 200, Dallas, Texas 75201-2998

JOB NO. 67515.001	DATE Nov 8 1995	DESIGNED BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-TYP.dgn	CAD DATE Nov 8 1995	SCALE 1" = 10'	SHEET 2 OF 14

**GENERAL NOTES:**

1. CONSTRUCTION ACTIVITY REQUIRING LANE CLOSURES MUST BE PERFORMED BETWEEN THE HOURS OF 8:30 AM AND 4:00 PM.
2. A MINIMUM OF 2 LANES IN EACH DIRECTION MUST BE OPEN ON ALL ROADWAYS EXCEPT DURING THE HOURS SPECIFIED IN NOTE 1.
3. ANY EXISTING OR PROPOSED SIGNAGE THAT IS IN CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE COVERED DURING THE HOURS OF TRAFFIC CONTROL OPERATION.
4. EXISTING PAVEMENT MARKINGS ARE TO REMAIN IN PLACE DURING PHASE I CONSTRUCTION.
5. FINAL PAVEMENT MARKINGS AND SIGNAGE IS TO BE IN PLACE AS SHOWN BEFORE PHASE II CONSTRUCTION BEGINS.
6. PLAN SHOWS LANE CLOSURES ALLOWED ONLY DURING HOURS CONTRACTOR IS WORKING. TWO LANES OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED WHEN CONTRACTOR IS NOT WORKING.

7. PLAN SHOWS MINIMUM REQUIREMENTS FOR BARRICADING. TOWN OF ADDISON RESERVES THE RIGHT TO REQUIRE CONTRACTOR TO PLACE ADDITIONAL SIGNS AND BARRICADES IF TOWN DEEMS NECESSARY DURING CONSTRUCTION.
8. CONTRACTOR MAY MODIFY PLAN BY SUBMITTING A REVISED DRAWING TO TOWN OF ADDISON FOR REVIEW AND APPROVAL. CONTRACTOR MAY NOT DEVIATE FROM PLAN WITHOUT APPROVAL OF THE TOWN.
9. THE CONTRACTOR SHALL TAKE CARE TO ASSURE THAT ALL TRAFFIC CONTROL DEVICES AND WORK ZONE PAVEMENT MARKINGS BE KEPT IN A HIGHLY VISIBLE CONDITION (CLEAN, UPRIGHT, AND PROPER LOCATION).
10. THE CONTRACTOR IS RESPONSIBLE FOR CONTINUED PROPERTY ACCESS DURING ALL CONSTRUCTION PHASES. A MINIMUM OF ONE DRIVEWAY MUST REMAIN OPEN TO EACH PROPERTY.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROPER DRAINAGE DURING ALL CONSTRUCTION PHASES. WATER WILL NOT BE ALLOWED TO POND ON ANY ROADWAY SURFACE AND RUNOFF FROM ADJACENT PROPERTIES SHALL NOT BE IMPEDED.
12. ANY DEVICE PLACED BY THE CONTRACTOR SHALL BE LOCATED IN SUCH A MANNER AS NOT TO INTERFERE WITH THE SIGHT DISTANCE OF DRIVERS ENTERING THE ROADWAY.
13. CONSTRUCTION OF THE 21" STORM SEWER LATERAL SHALL COMMENCE AT THE BEGINNING OF PHASE I AND FINISH AS QUICKLY AS POSSIBLE TO MINIMIZE THE CLOSURE OF TWO LANES ON SOUTHBOUND DALLAS PARKWAY.



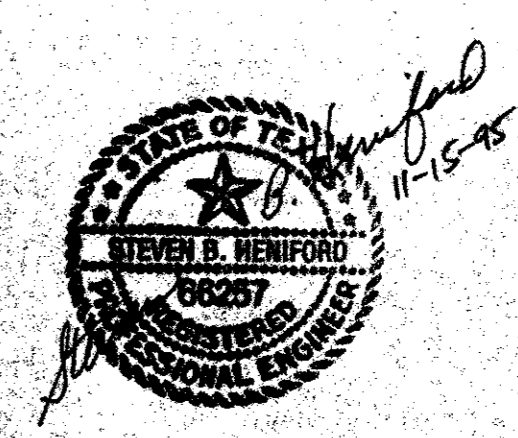
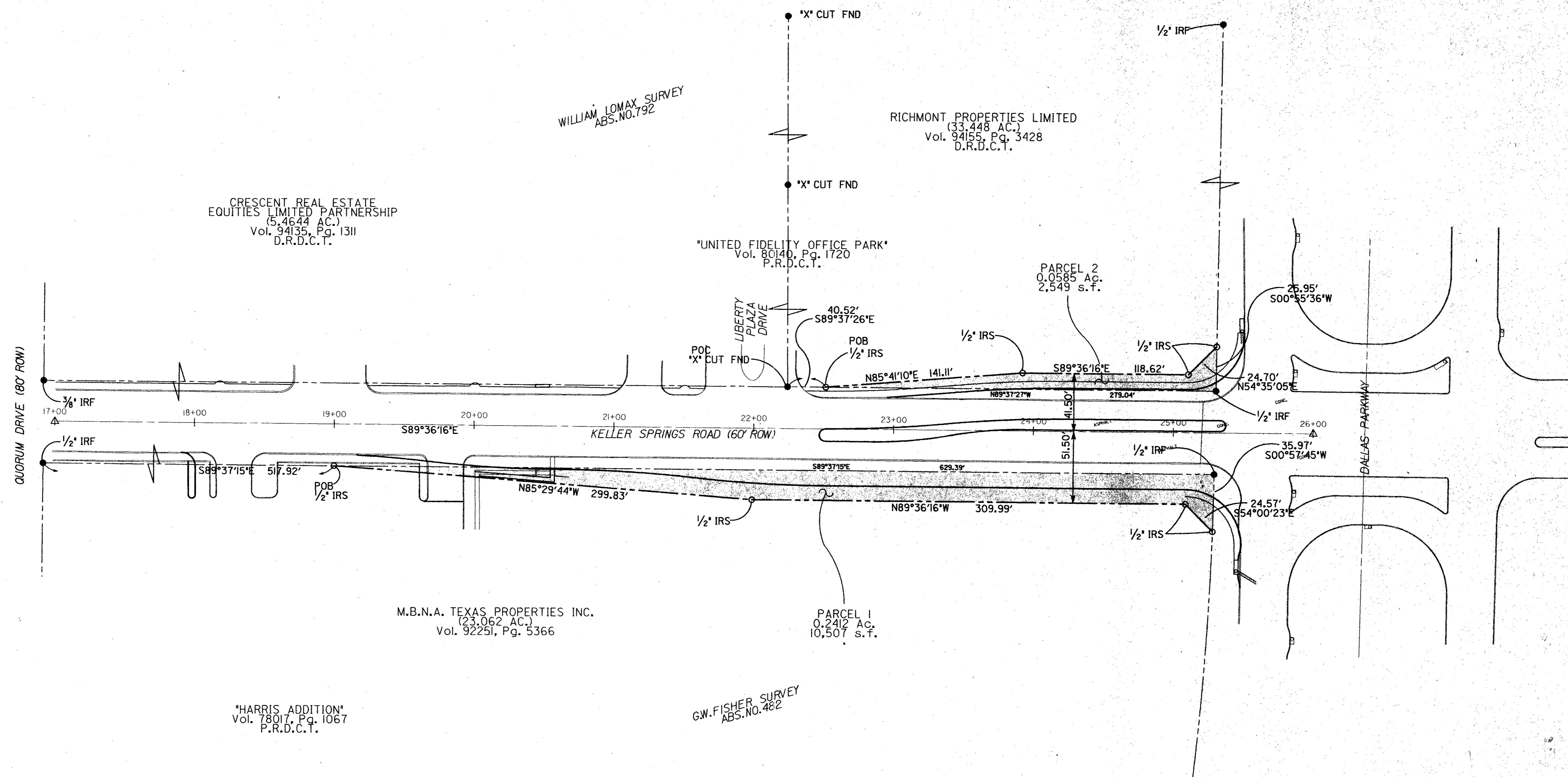
**KELLER SPRINGS ROAD  
NORTH DALLAS TOLLWAY  
INTERSECTION IMPROVEMENTS  
TRAFFIC CONTROL PLAN**

TOWN OF ADDISON, TEXAS

**RUST LICHLITER/JAMESON**

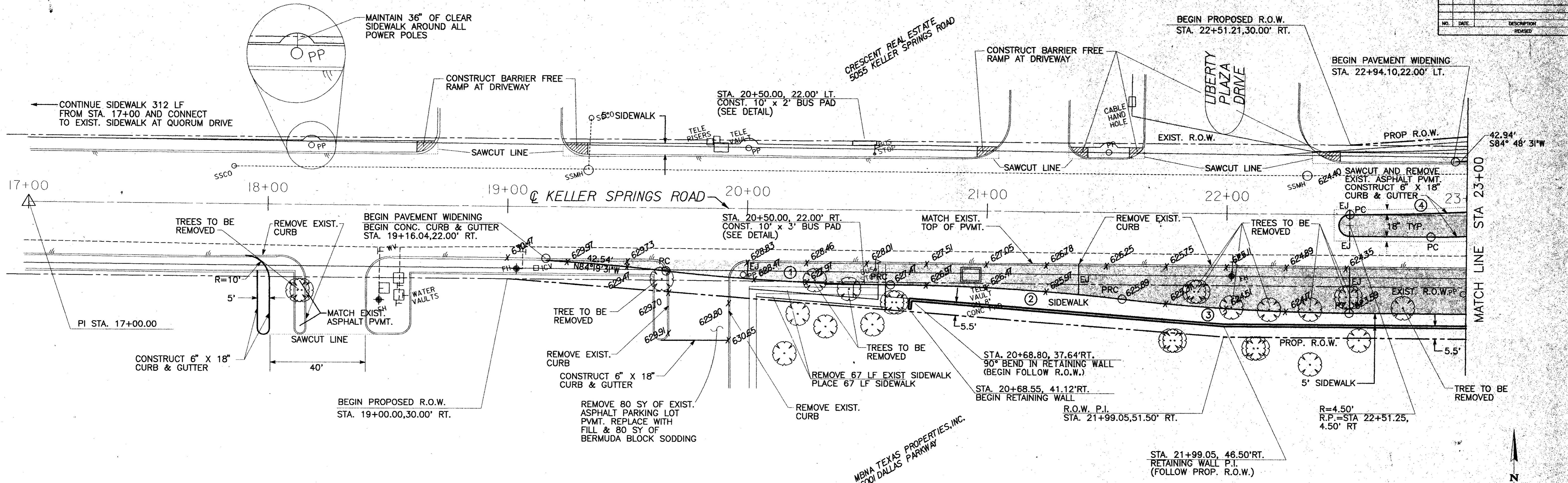
Engineering & Infrastructure  
Consulting Engineers, Scientists and Planners  
389 W. Henderson Lane, Suite 200, Dallas, Texas 75243-4901

JOB NO. 67515.001	DATE Nov 8 1995	CREATED BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-TC.dwg	CAD DATE Nov 8 1995	SCALE 1" = 40'	SHEET 5 OF 14

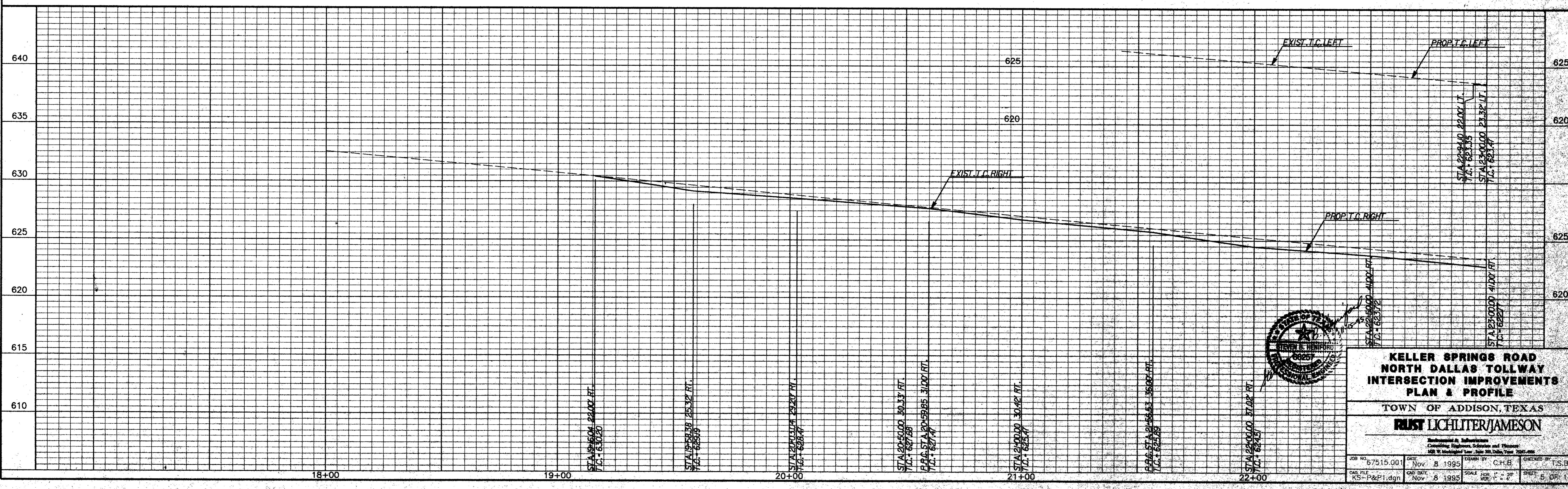
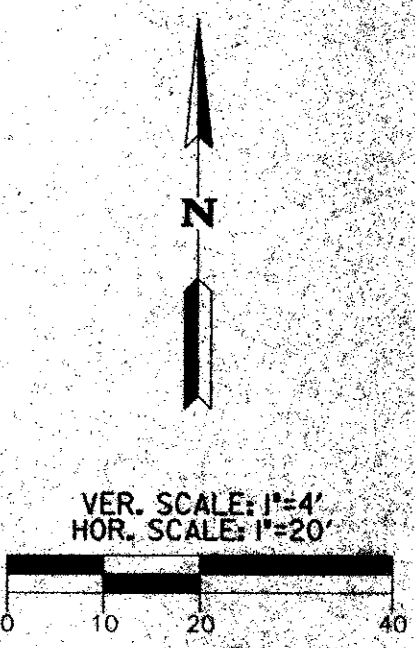


<b>KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS R.O.W. PLAN</b>			
TOWN OF ADDISON, TEXAS			
<b>RUST LICHLITER/JAMESON</b>			
<small>Business &amp; Professional Consulting Engineers, Scientists and Planners 402 W. Montfort Lane, Suite 200, Dallas, Texas 75201-2997</small>			
JOB NO. 67515.001	DATE Nov 8 1995	DRAWN BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-ROWPL.dgn	CAD DATE Nov 8 1995	SCALE 1" = 40'	SHEET 4 OF 14

NO.	DATE	DESCRIPTION	BY



<p><b>CURVE DATA 1</b>          PC STA 19+66.22, 26.11' RT.          PI STA 20+31.42, 31.00' RT.          PT STA 20+59.85, 31.00' RT.  <math>\Delta=05^{\circ}58'17''</math>          R=900.00          L=93.80          T=46.94</p>	<p><b>CURVE DATA 2</b>          PC STA 20+59.85, 31.00' RT.          PI STA 21+08.33, 30.90' RT.          PT STA 21+56.53, 36.00' RT.  <math>\Delta=06^{\circ}09'58''</math>          R=900.00          L=96.86          T=48.48</p>	<p><b>CURVE DATA 3</b>          PC STA 21+56.53, 36.00' RT.          PI STA 22+03.77, 41.00' RT.          PT STA 22+51.27, 41.00' RT.  <math>\Delta=06^{\circ}02'32''</math>          R=900.00          L=94.91          T=47.50</p>	<p><b>CURVE DATA 4</b>          PC STA 22+51.18, 22.00' LT.          PI STA 22+94.10, 22.18' LT.          PT STA 23+36.80, 26.45' LT.  <math>\Delta=05^{\circ}27'37''</math>          R=900.00          L=85.77          T=42.92</p>
--	--	--	--



**KELLER SPRINGS ROAD  
 NORTH DALLAS TOLLWAY  
 INTERSECTION IMPROVEMENTS  
 PLAN & PROFILE**

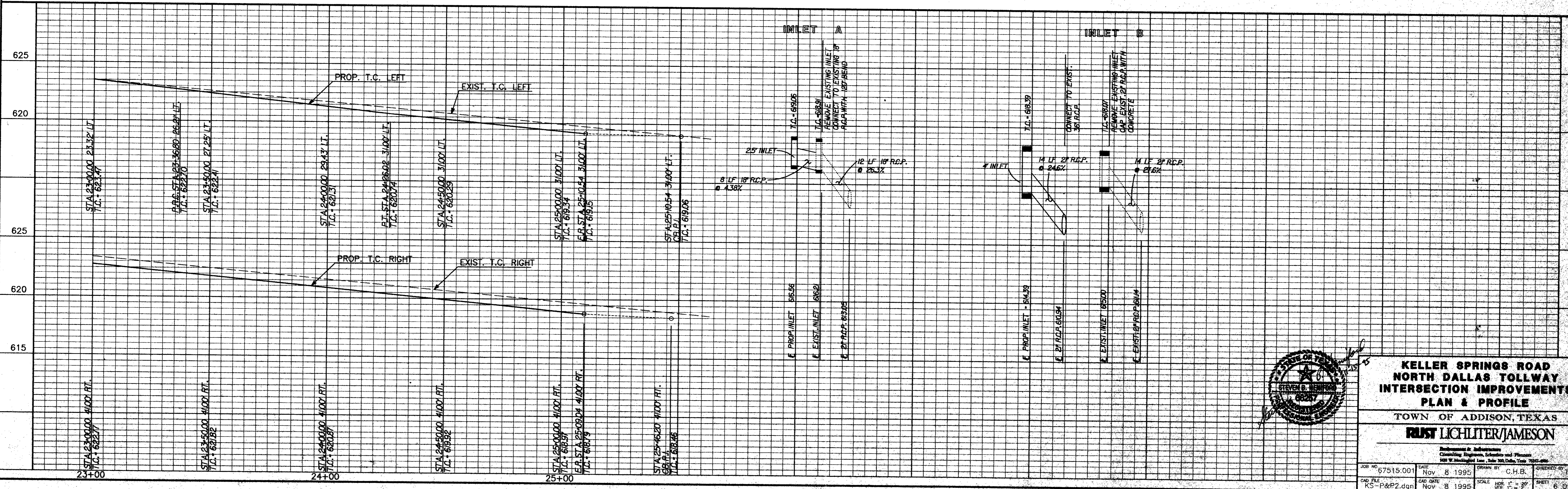
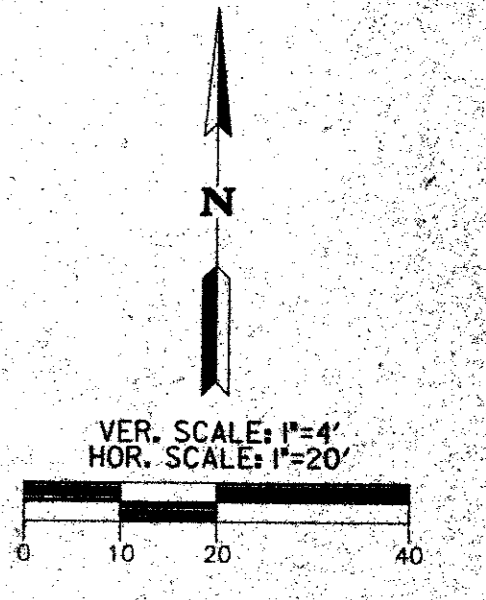
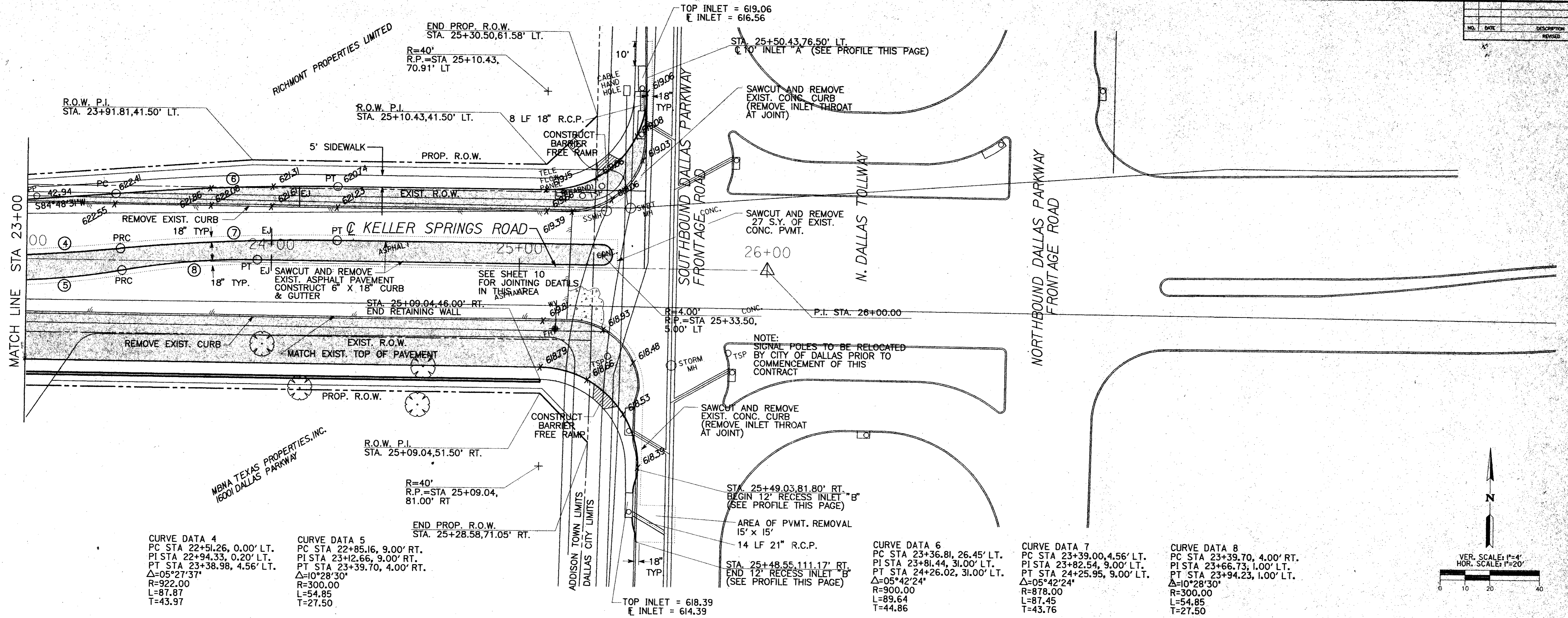
TOWN OF ADDISON, TEXAS

**JUST LICHLITER/JAMESON**

Professional Engineer  
 Consulting Engineers, Architects and Planners  
 100 W. Main Street, Suite 500, Dallas, Texas 75201-2000

JOB NO. 67515.001	DATE Nov. 8 1995	DRAWN BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-P&P1.dgn	CAD DATE Nov. 8 1995	SCALE HOR. 1"=20'	SHEET 6 OF 14

NO.	DATE	DESCRIPTION	BY



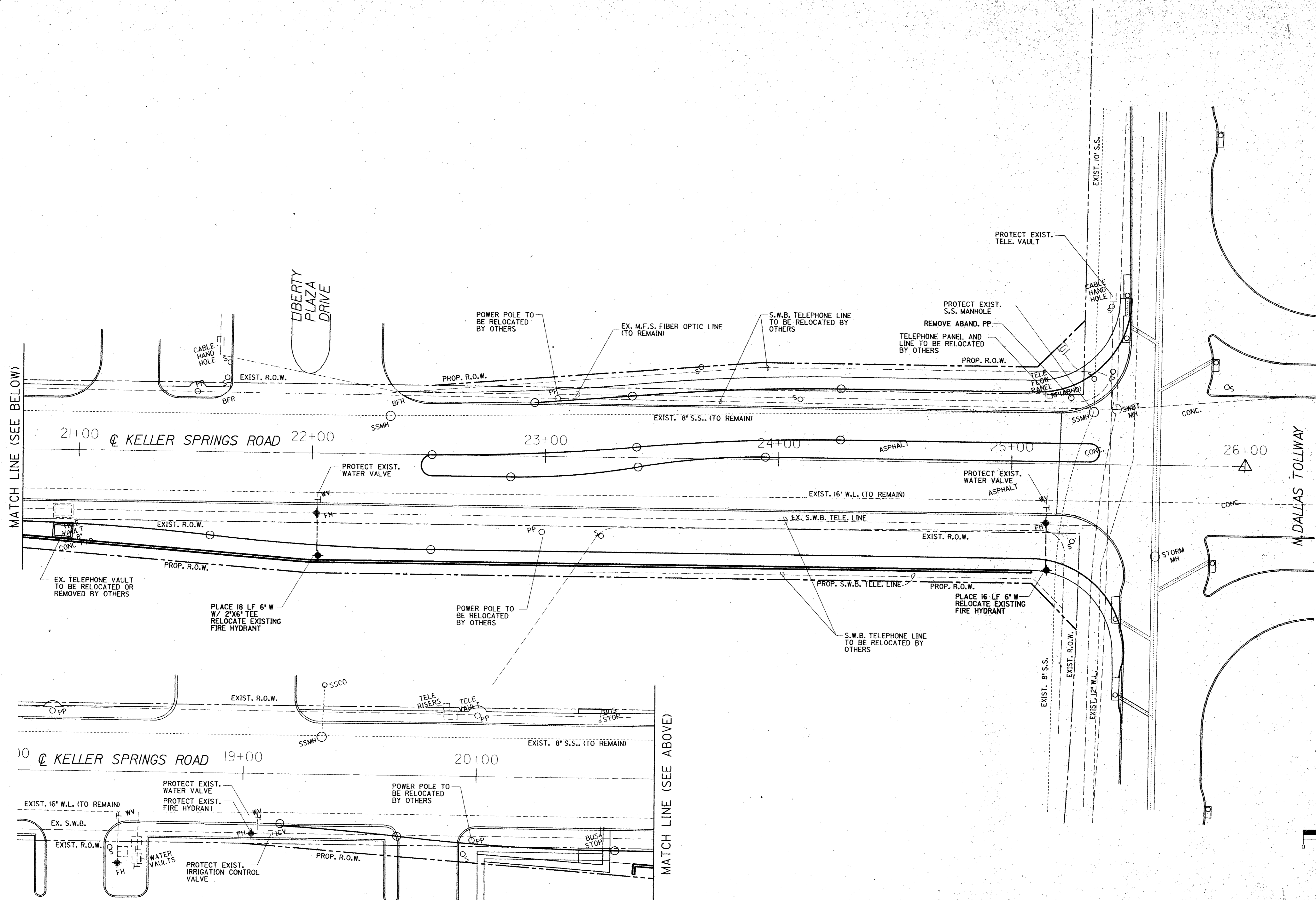
**KELLER SPRINGS ROAD  
NORTH DALLAS TOLLWAY  
INTERSECTION IMPROVEMENTS  
PLAN & PROFILE**

TOWN OF ADDISON, TEXAS

**RUST LICHLITER/JAMESON**

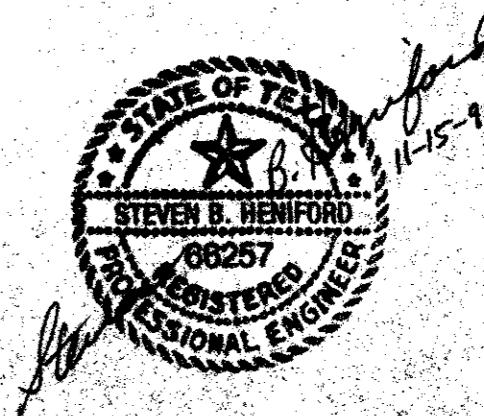
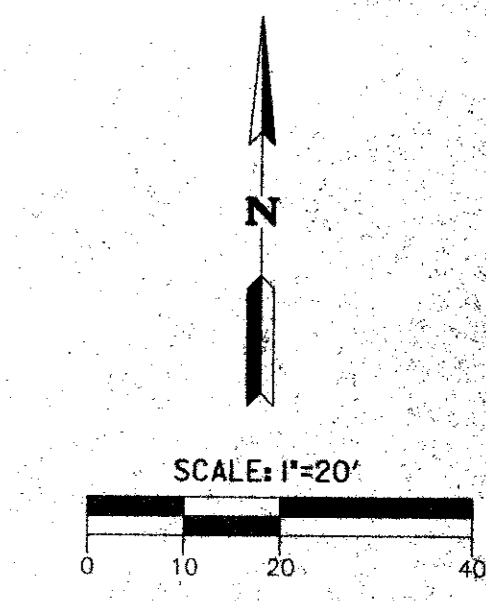
Engineering & Architecture  
Civil, Mechanical, Electrical and Planning  
100 W. Woodland Lane, Suite 200, Dallas, Texas 75207-4800

JOB NO. 67515.001	DATE Nov 8 1995	DRAWN BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-P&P2.dgn	CAD DATE Nov 8 1995	SCALE 1" = 20'	SHEET 6 OF 14



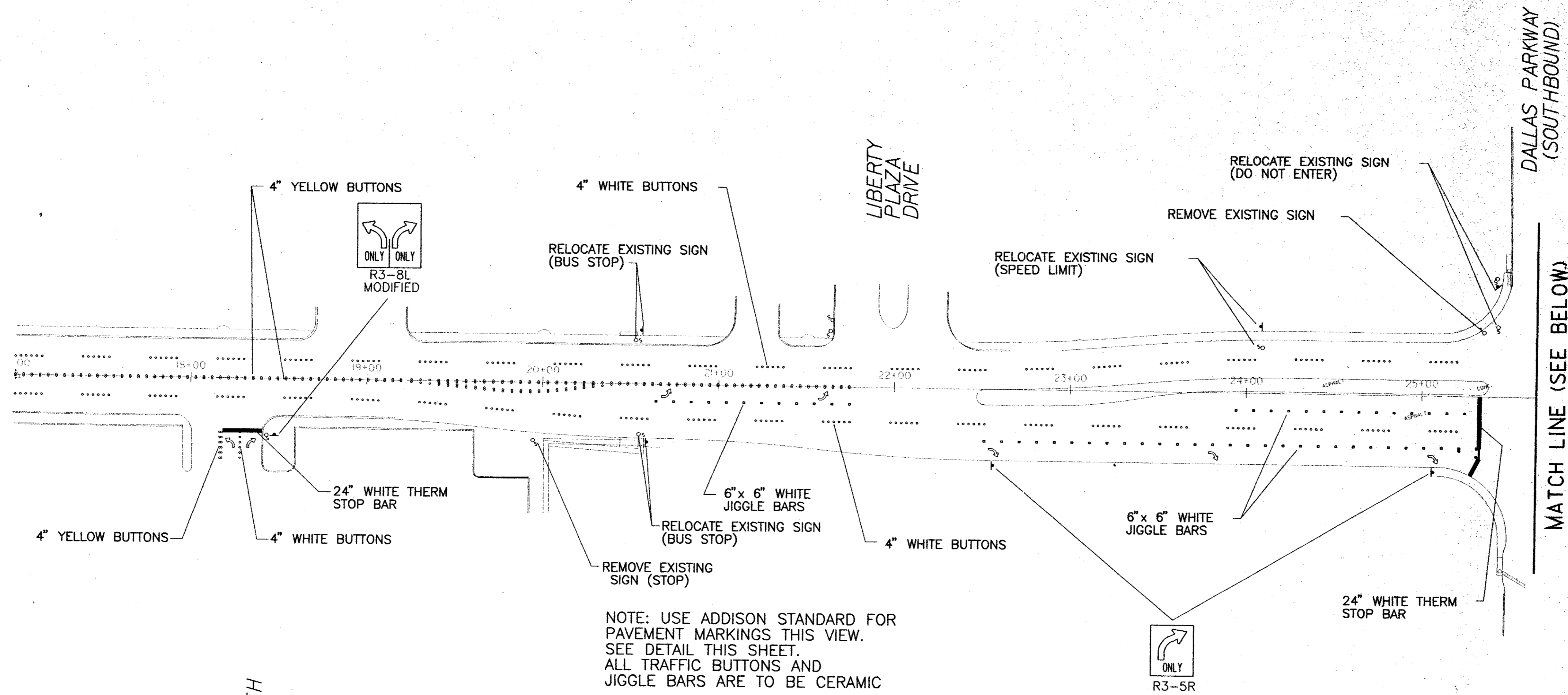
MATCH LINE (SEE BELOW)

MATCH LINE (SEE ABOVE)



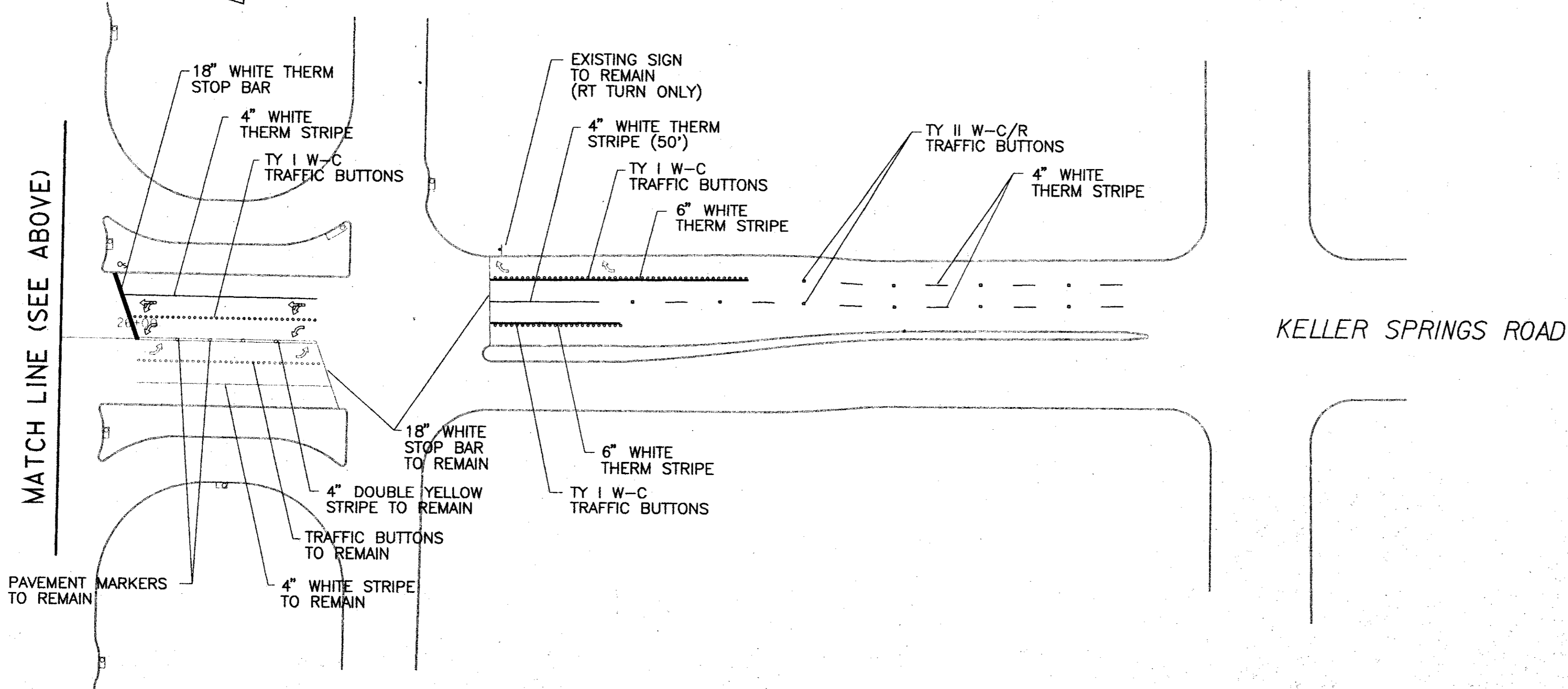
<b>KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS UTILITY LAYOUT</b>			
TOWN OF ADDISON, TEXAS			
<b>RUST LICHTER/JAMESON</b>			
<small>Consulting Engineers, Scientists and Planners 400 W. Mockingbird Lane, Suite 500, Dallas, Texas 75244</small>			
JOB NO. 87515.001	DATE Nov. 8 1995	DRAWN BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-UTIL.dgn	NOV. 8 1995	SCALE 1" = 20'	SHEET 7 OF 14

KELLER SPRINGS ROAD



NOTE: USE ADDISON STANDARD FOR PAVEMENT MARKINGS THIS VIEW. SEE DETAIL THIS SHEET. ALL TRAFFIC BUTTONS AND JIGGLE BARS ARE TO BE CERAMIC

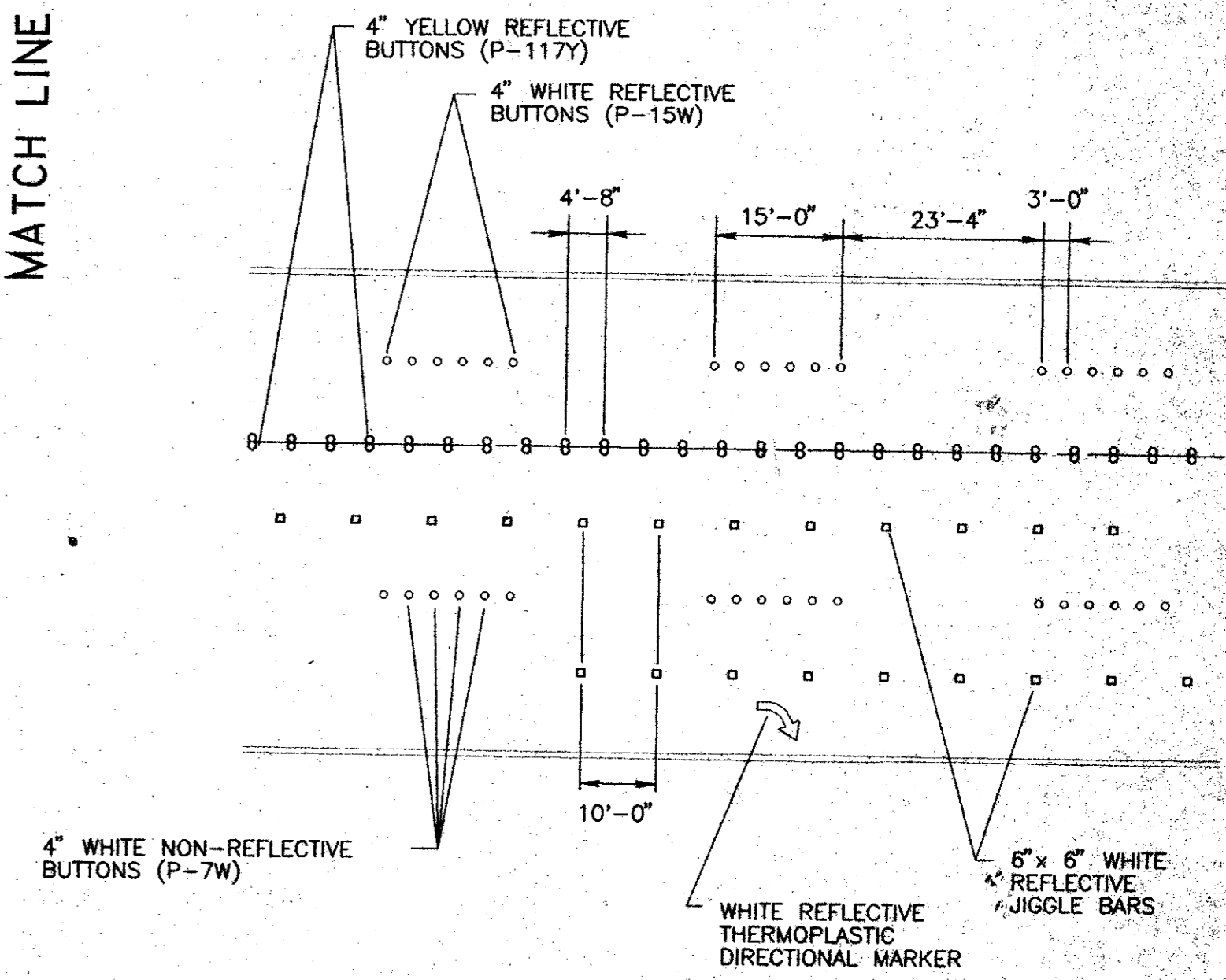
DALLAS NORTH TOLLWAY



NOTE: USE DALLAS STANDARD FOR PAVEMENT MARKINGS THIS VIEW. SEE MISCELLANEOUS DETAILS SHEET.

DALLAS PARKWAY (SOUTHBOUND)

MATCH LINE (SEE BELOW)

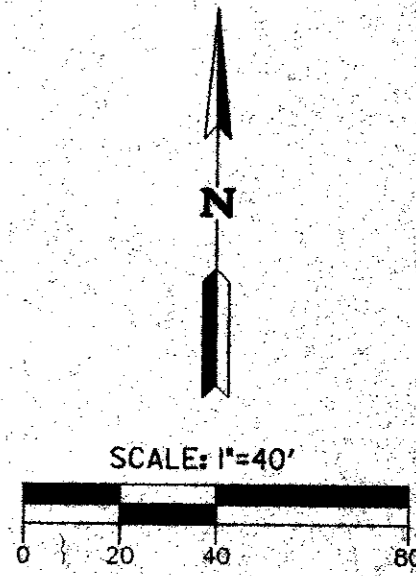
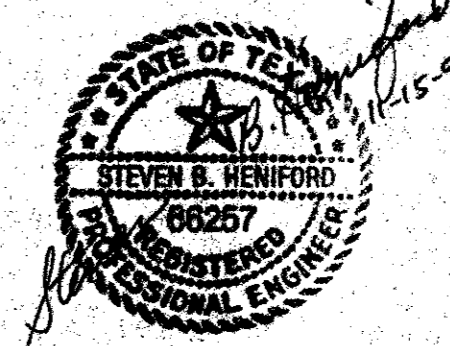


ADDISON PAVEMENT MARKING DETAIL (N.T.S.)

KELLER SPRINGS ROAD

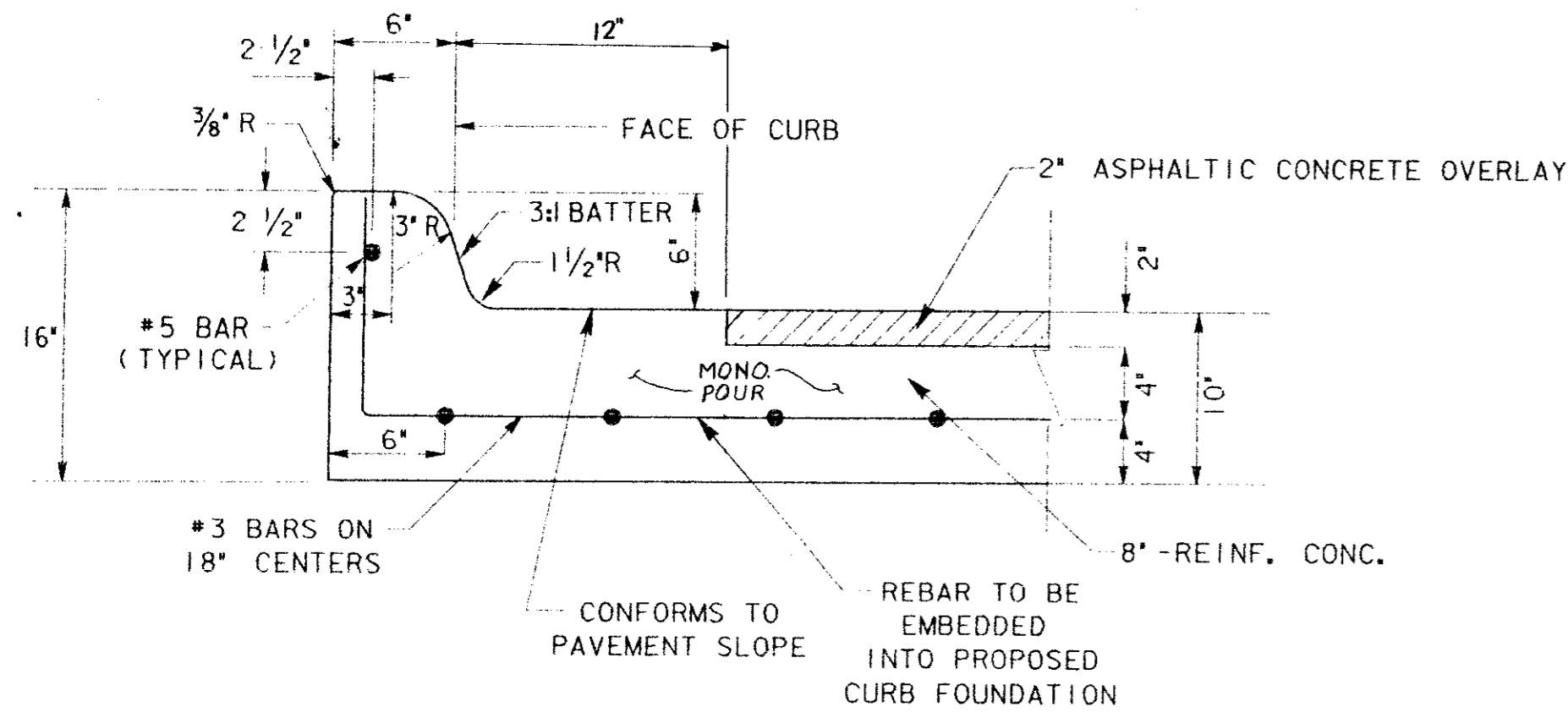
MATCH LINE (SEE ABOVE)

PAVEMENT MARKERS TO REMAIN

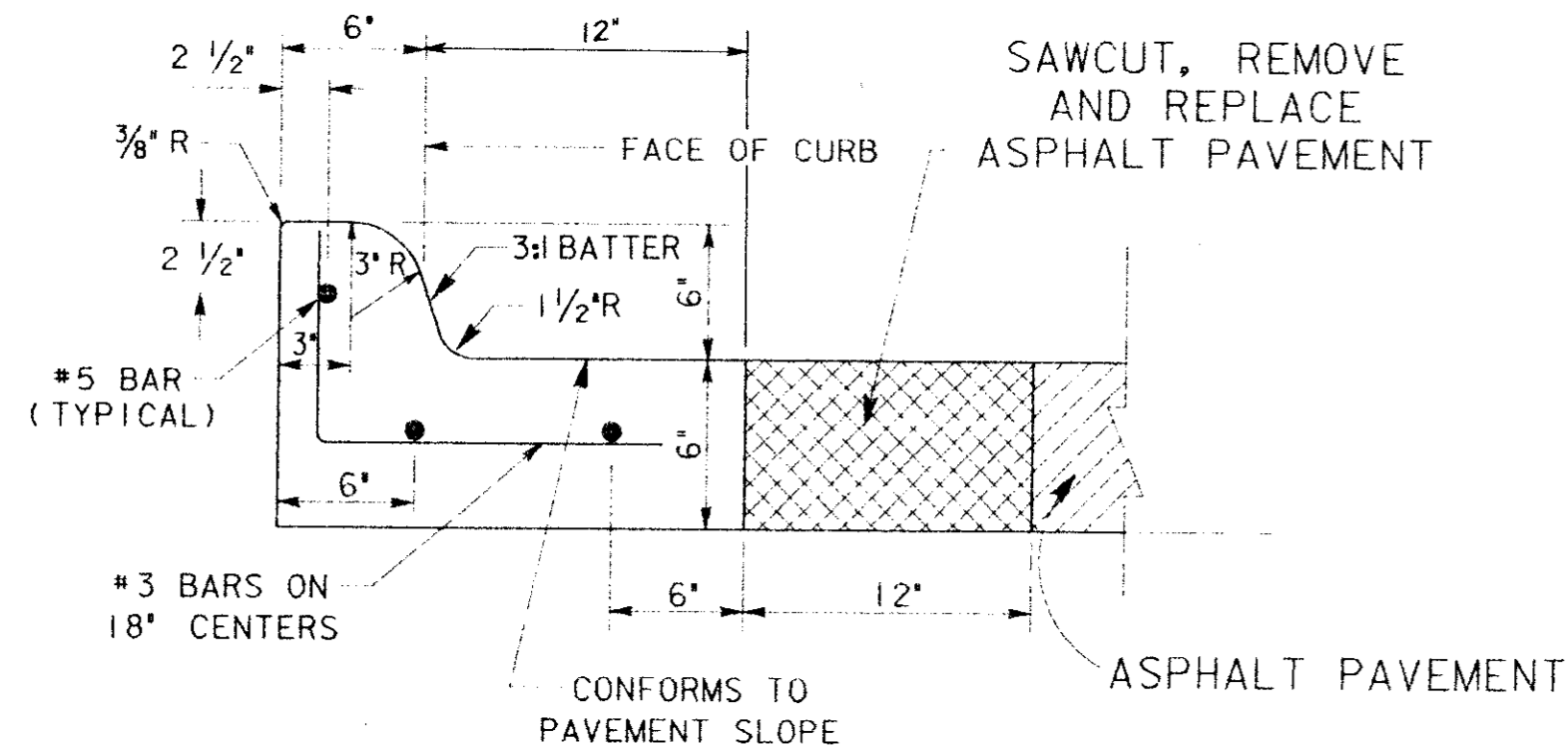


<b>KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS SIGNING AND STRIPING PLAN</b>				
TOWN OF ADDISON, TEXAS				
<b>FRIST LICHLITER/JAMESON</b>				
<small>Professional Engineer Consulting Engineers, Architects and Planners 1407 W. Woodbridge Lane, Suite 200, Dallas, Texas 75201-2000</small>				
JOB NO: 87515-001	DATE: Nov 8 1995	DRAWN BY: C.H.B.	CHECKED BY: T.S.B.	
CAD FILE: KS-STRP.dgn	SCALE: 1" = 40'	SHEET: 8 OF 14		





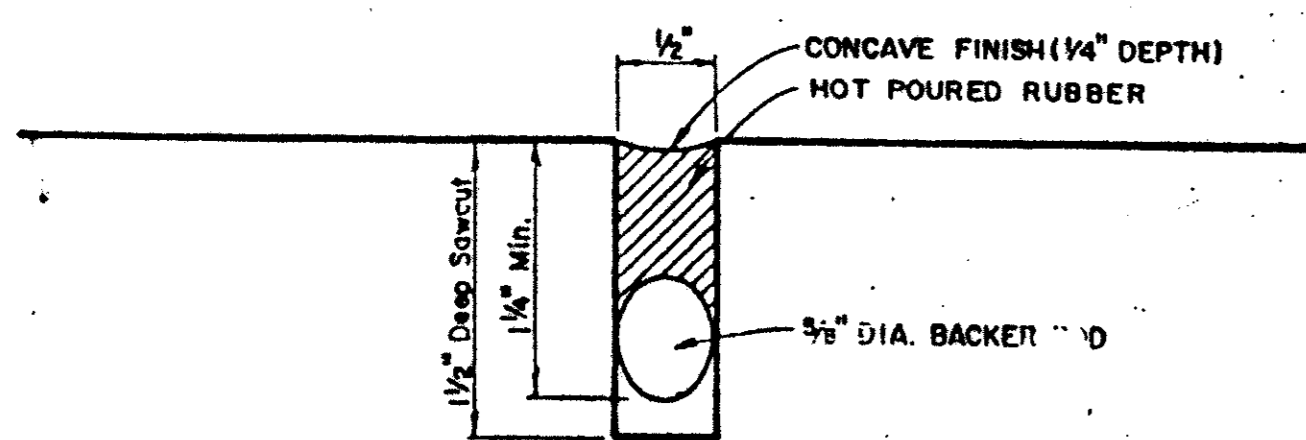
CONCRETE CURB AND GUTTER FOR CURB ADJACENT TO NEW PAVEMENT NOT TO SCALE



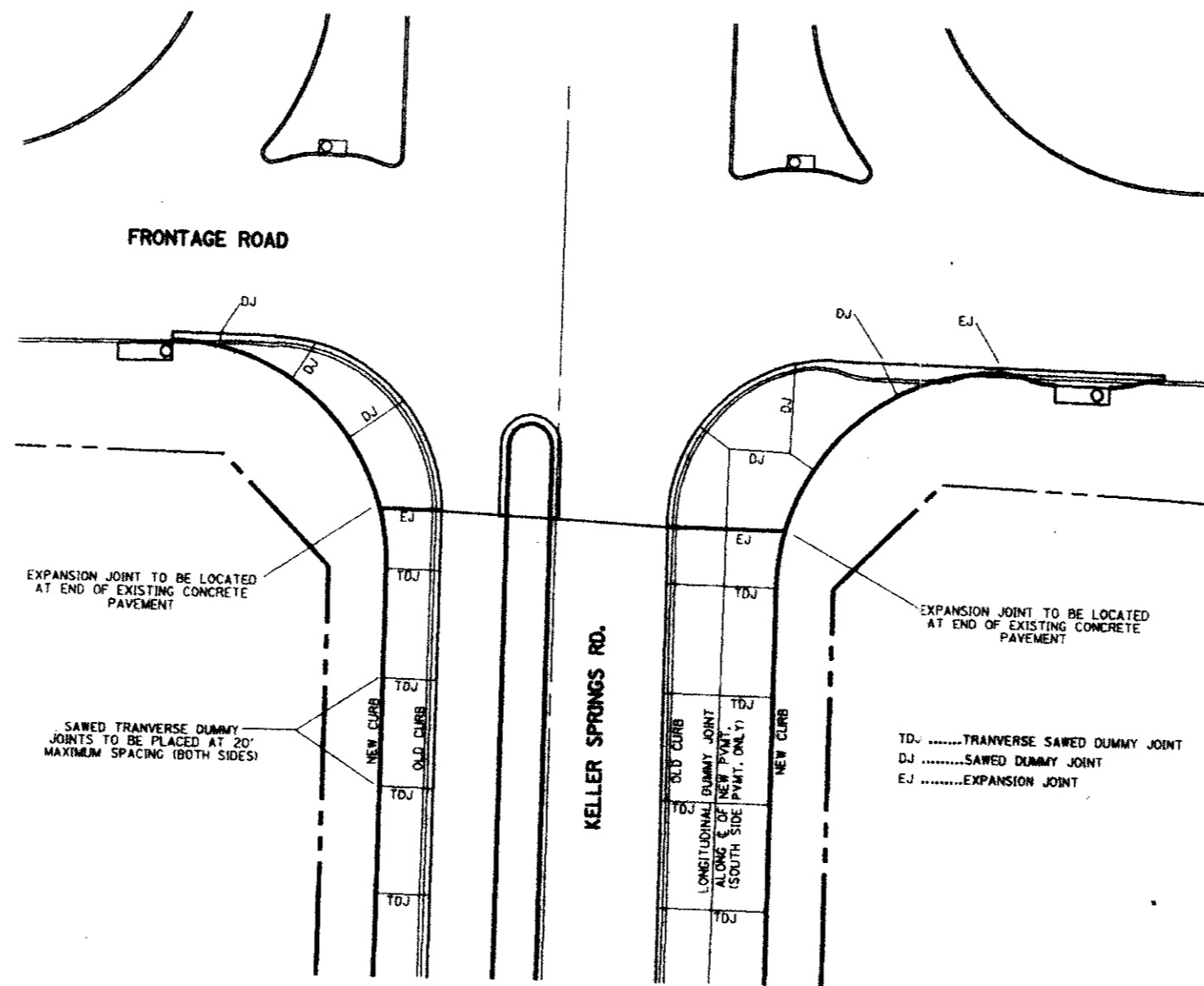
CONCRETE CURB AND GUTTER FOR RAISED MEDIAN NOT TO SCALE

**GENERAL NOTES**

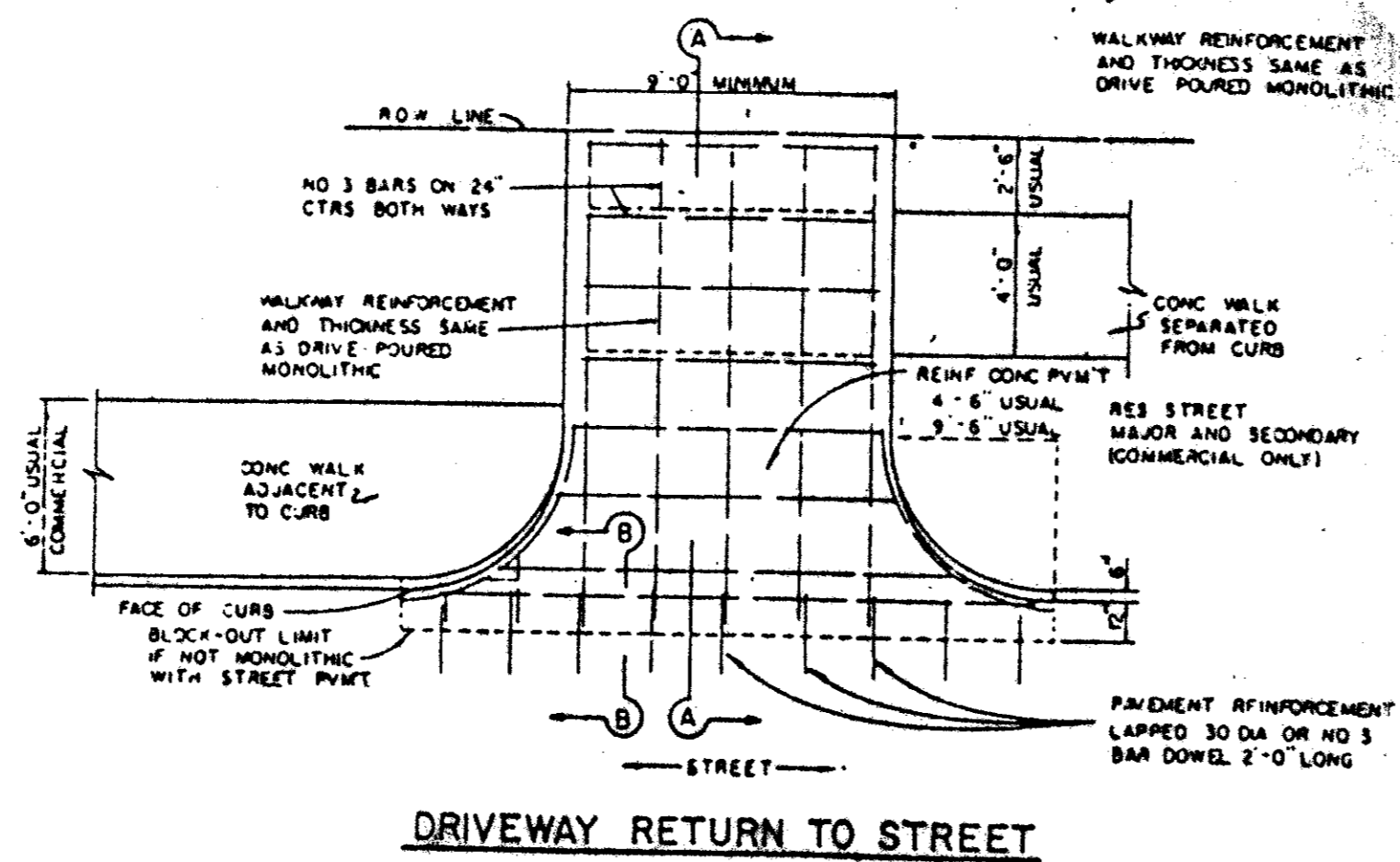
- A. GENERAL PAVEMENT THICKNESS FOR STREETS SHALL BE AS SPECIFIED BELOW IN SPECIAL NOTES.
- B. STANDARD SPECIFICATIONS REINFORCED CONCRETE PAVEMENTS
  1. ALL CURBS SHALL BE PLACED INTEGRAL WITH PAVEMENT
  2. CURBS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE CONCRETE PAVEMENT.
  3. DETAIL AND ARRANGEMENT OF JOINTS, ALL TYPES, SHALL BE AS SHOWN ON THE STANDARD CONSTRUCTION DETAILS, OR AS APPROVED BY ENGINEER.
  4. BAR LAPS SHALL BE 30 DIAMETERS.
- C. BAR CHAIRS OR AN APPROVED SUPPORTING DEVICE SHALL BE FURNISHED.



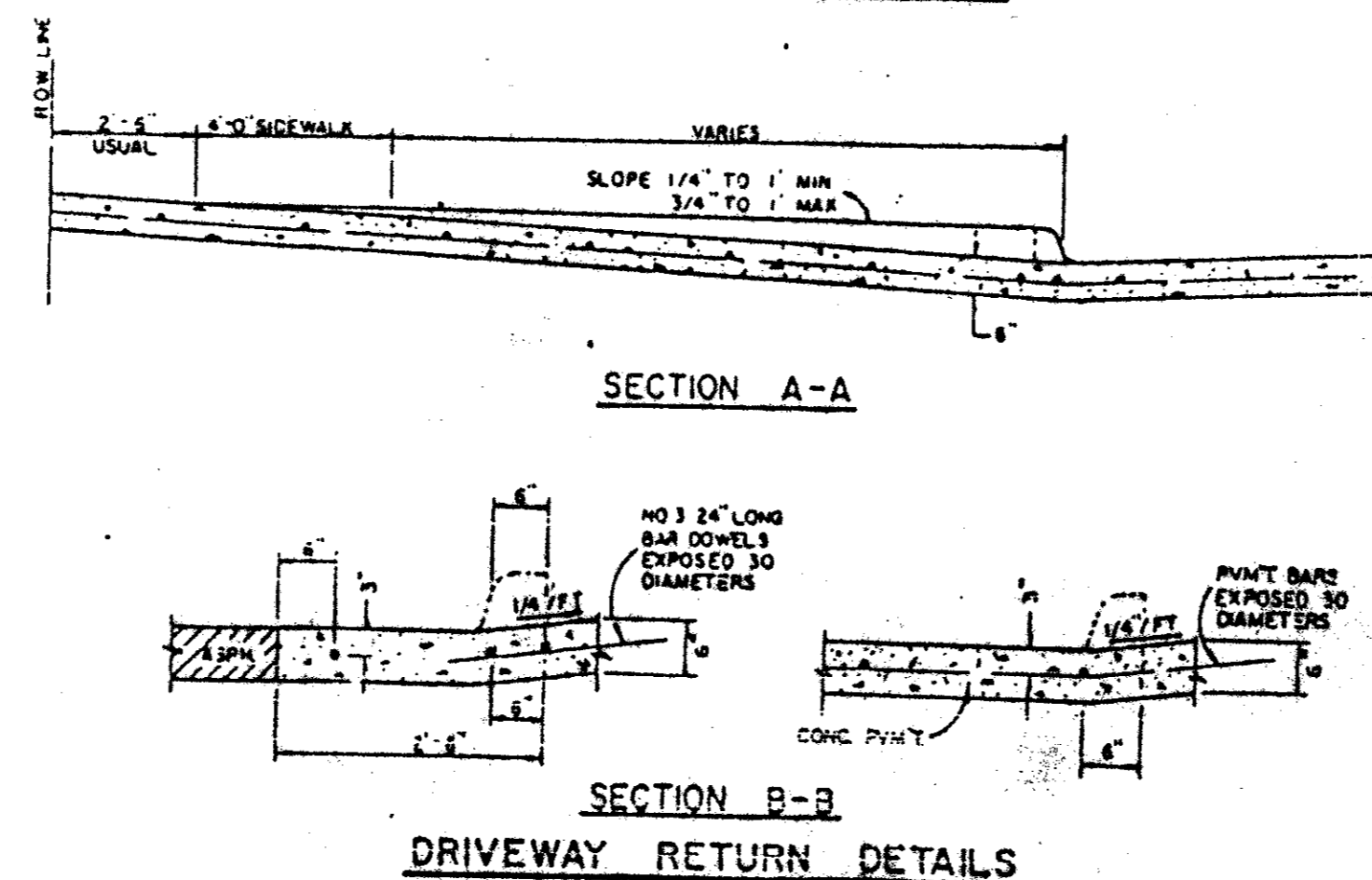
TYPICAL JOINT DETAIL



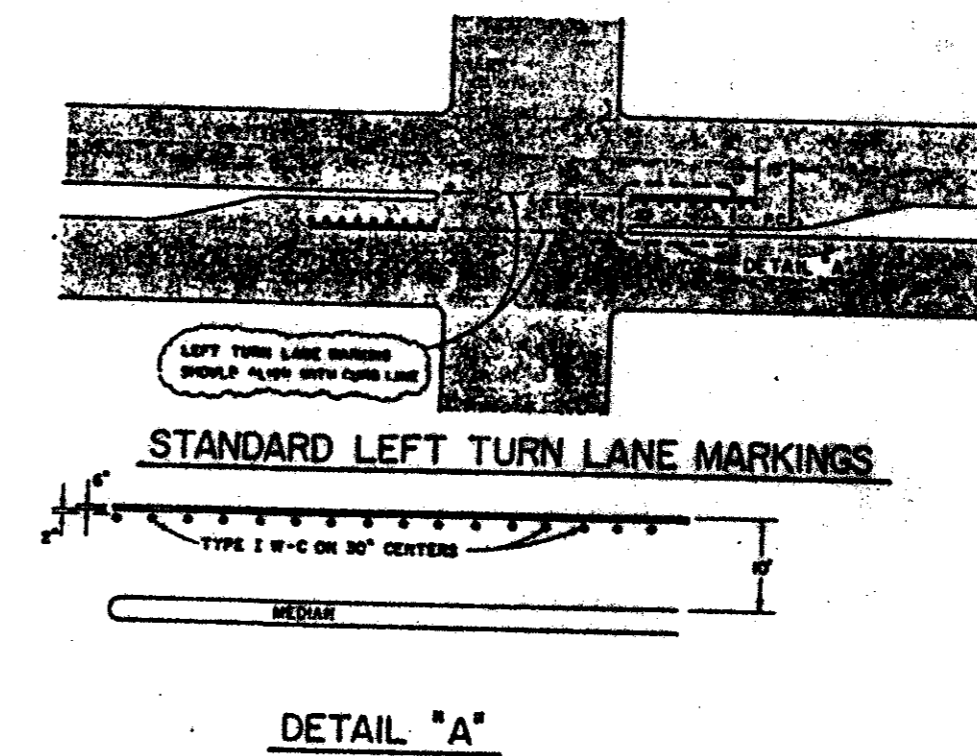
TYPICAL SAWED DUMMY JOINT LOCATION DETAIL N.T.S.



DRIVEWAY RETURN TO STREET

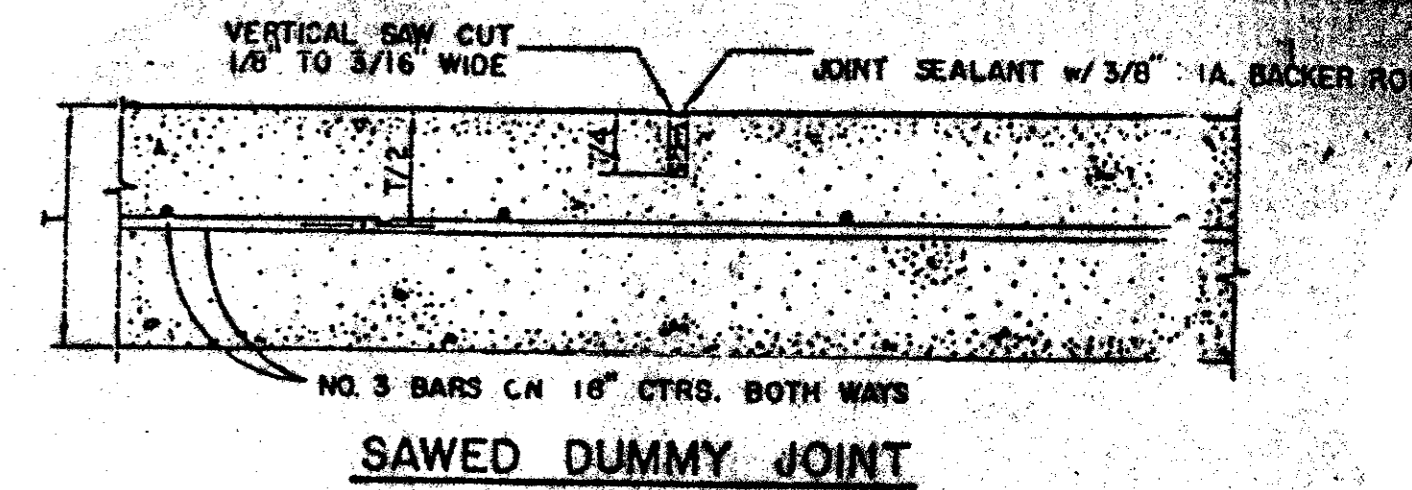


DRIVEWAY RETURN DETAILS

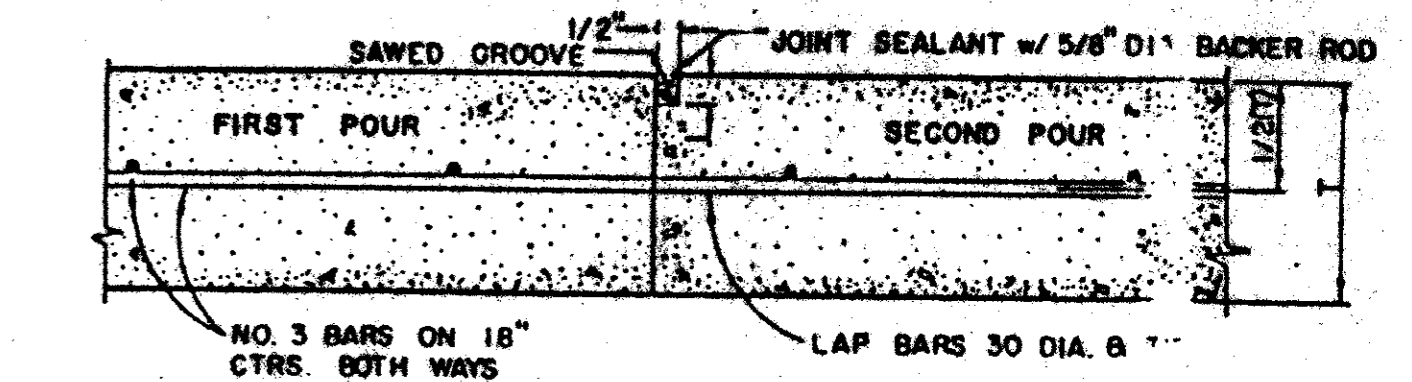


DETAIL "A"

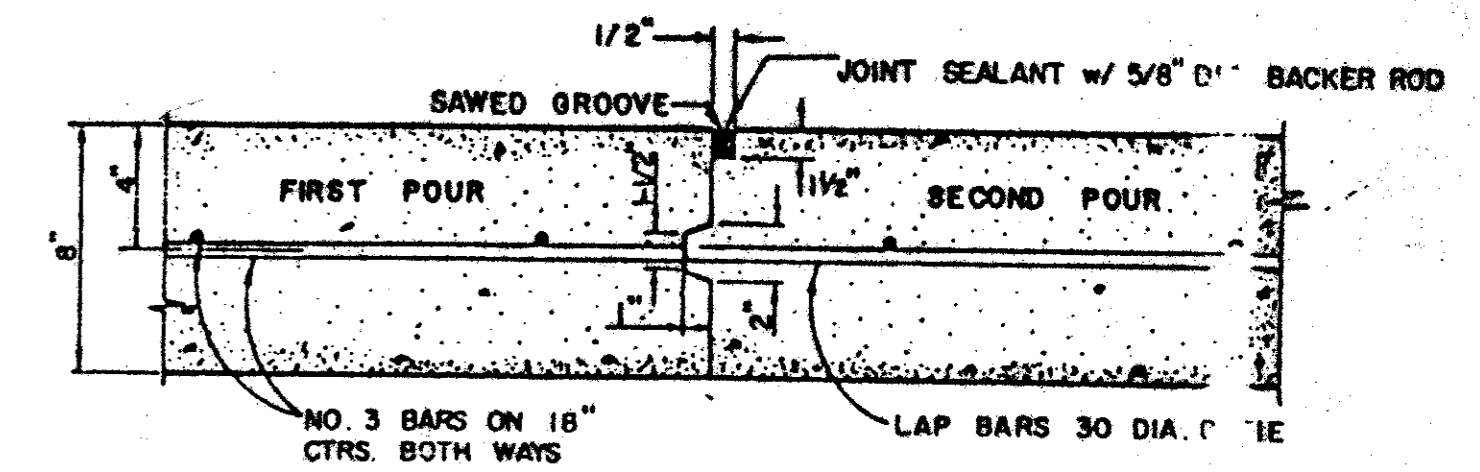
CITY OF DALLAS PAVEMENT MARKING DETAILS



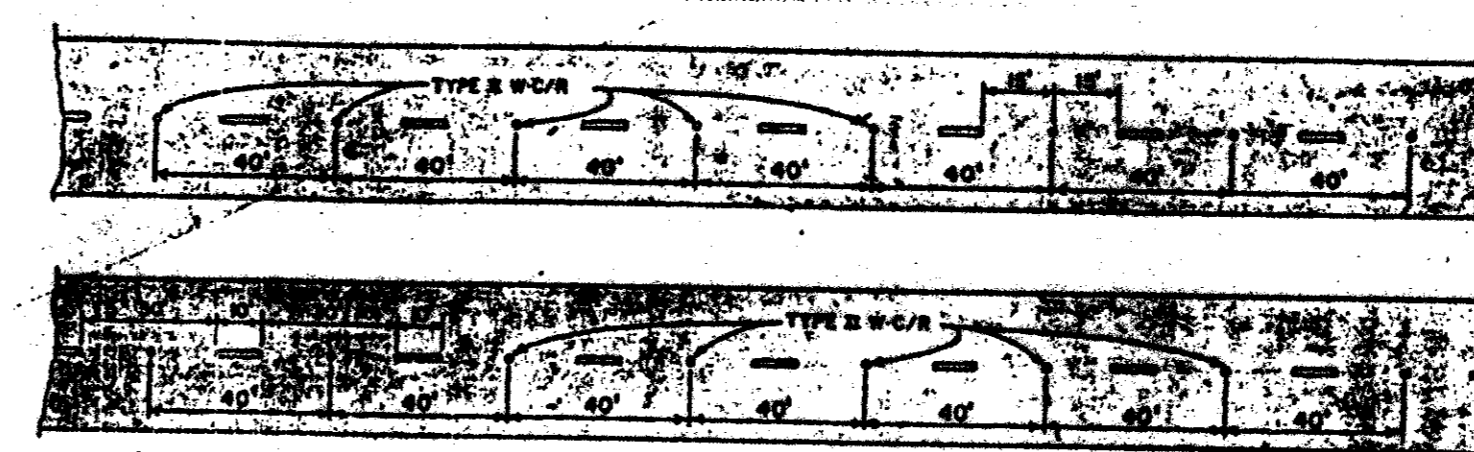
SAWED DUMMY JOINT



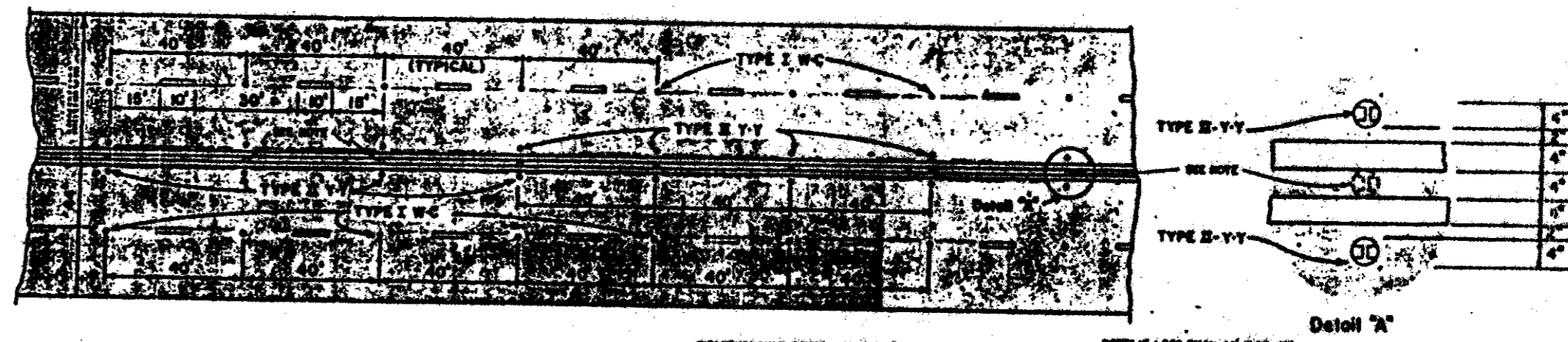
CONSTRUCTION JOINT FOR 6 INCH PAVEMENT



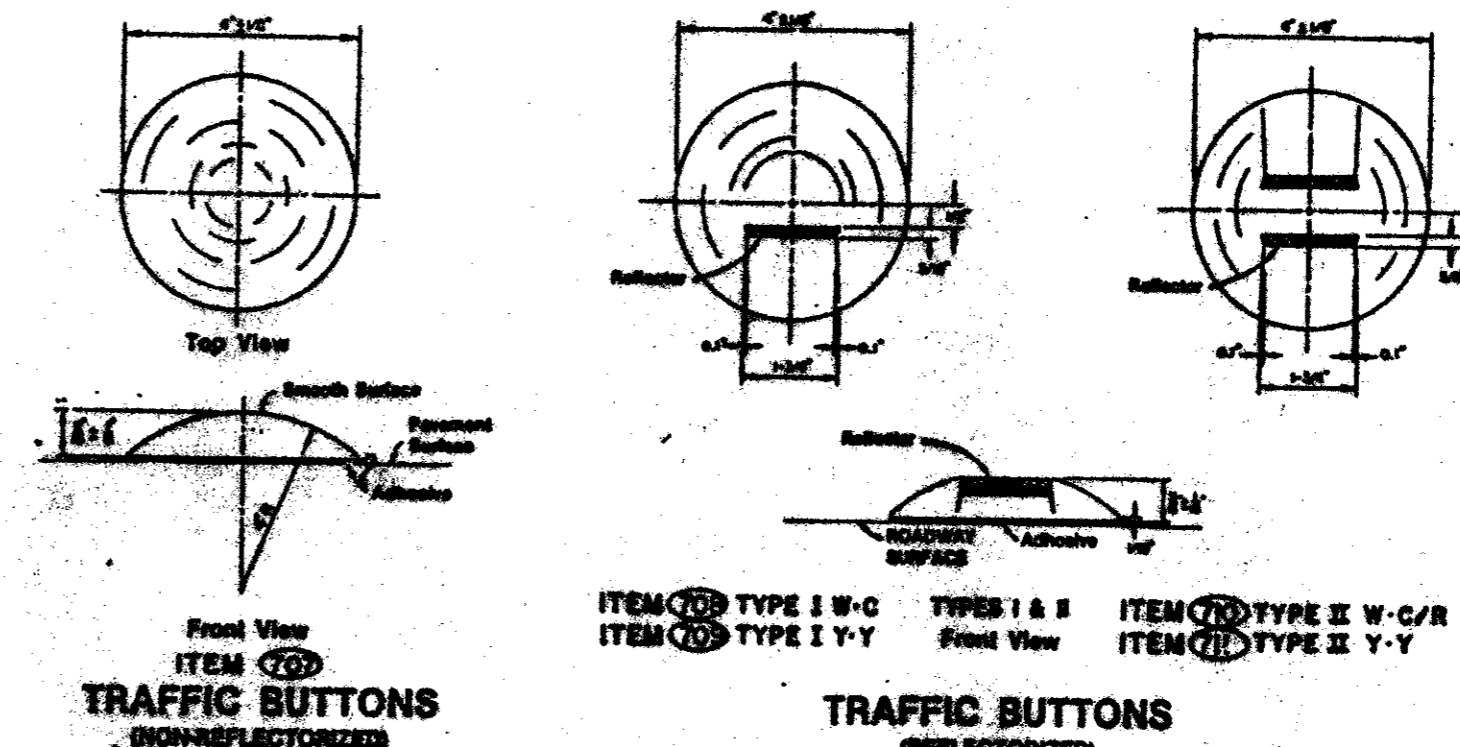
CONSTRUCTION JOINT FOR 8 INCH PAVEMENT



LANE LINES FOR DIVIDED THROUGHFARE

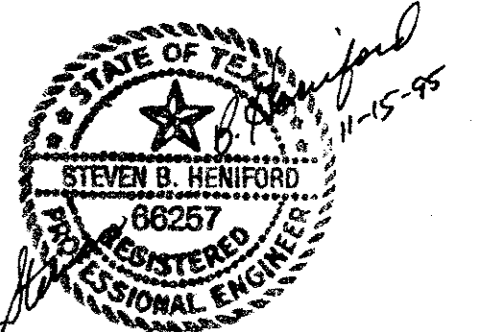


LANE LINES & CENTER LINES FOR UNDIVIDED SECONDARIES (44' or more in width)



TRAFFIC BUTTONS (NON-REFLECTORIZED)

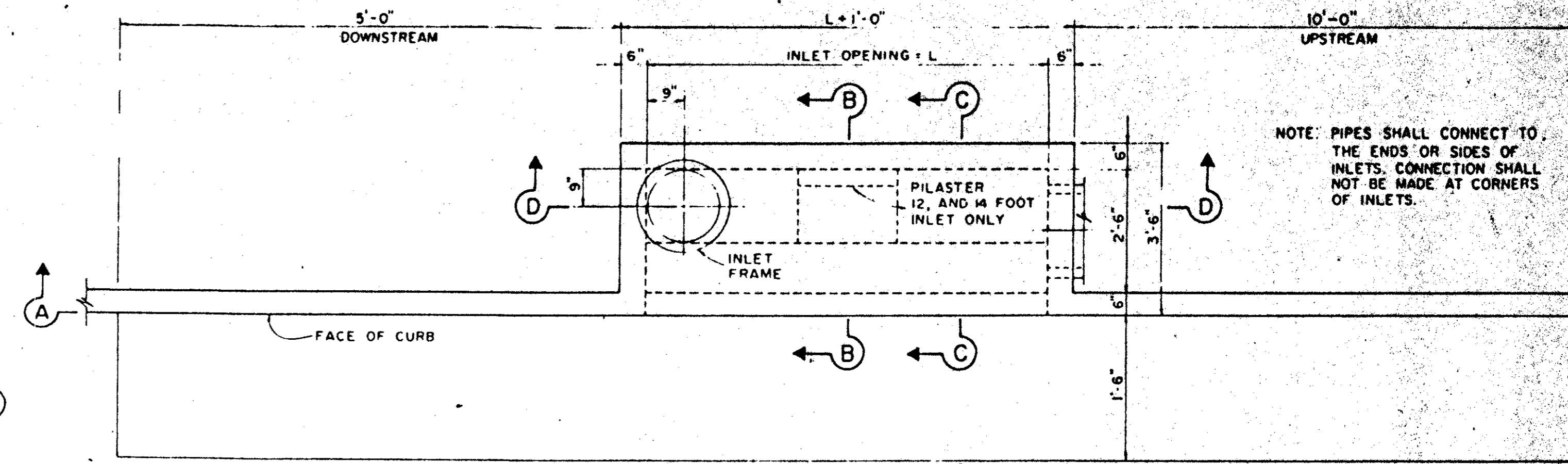
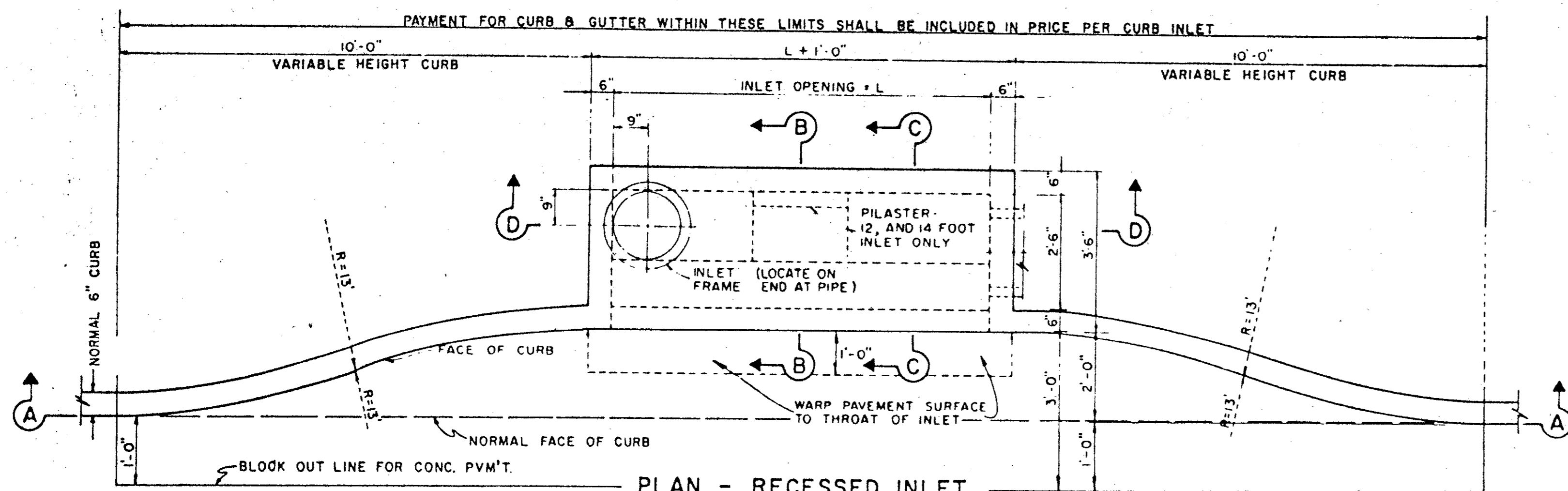
TRAFFIC BUTTONS (REFLECTORIZED)



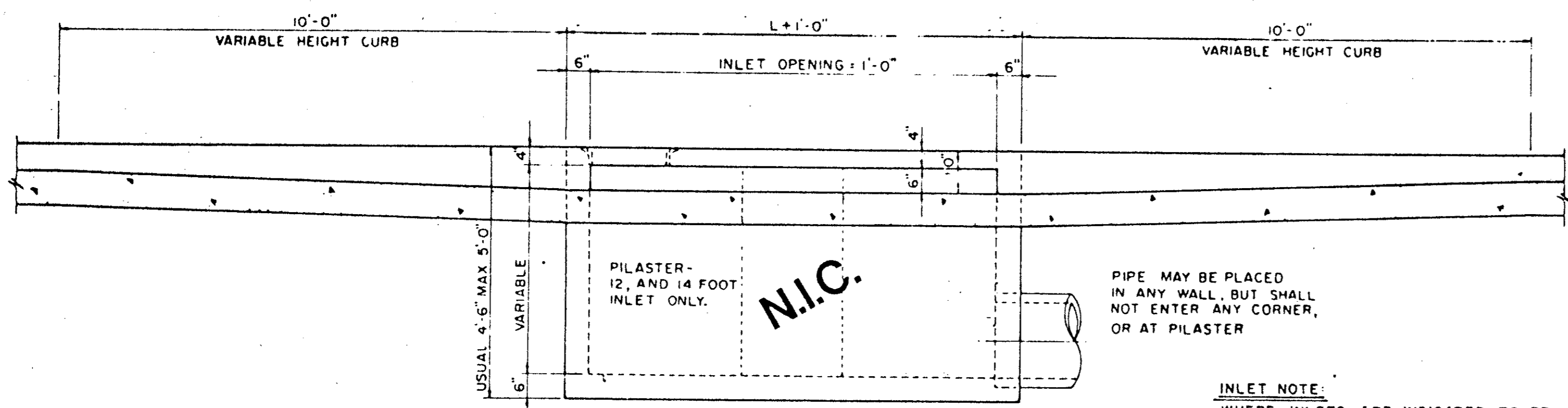
KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS MISCELLANEOUS DETAILS TOWN OF ADDISON, TEXAS

RUST LICHLITER/JAMESON

JOB NO. 67515.00	DATE Nov 8 1995	DRAWN BY C.H.B.	CHECKED BY T.S.B.
CAD FILE KS-MISC.dgn	CAD DATE Nov 8 1995	SCALE	SHEET 9 OF 14

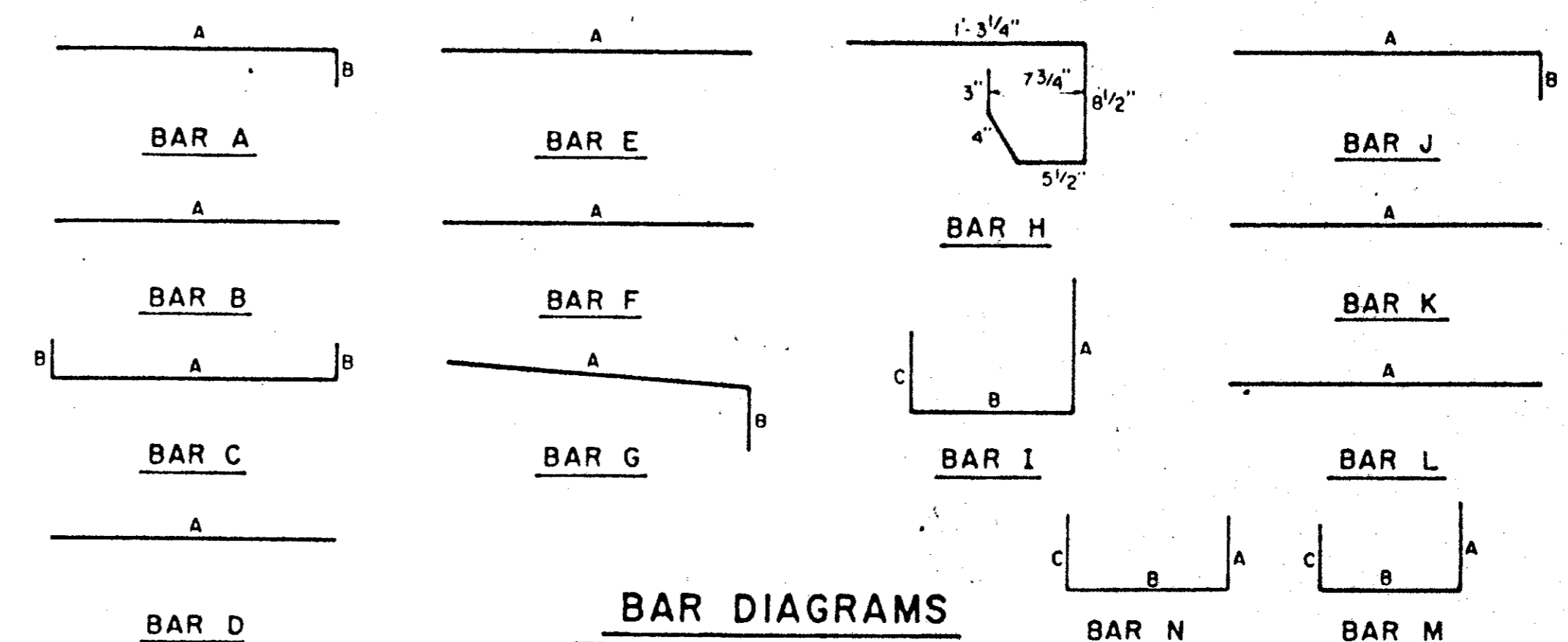


NOTE: PIPES SHALL CONNECT TO THE ENDS OR SIDES OF INLETS. CONNECTION SHALL NOT BE MADE AT CORNERS OF INLETS.



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.

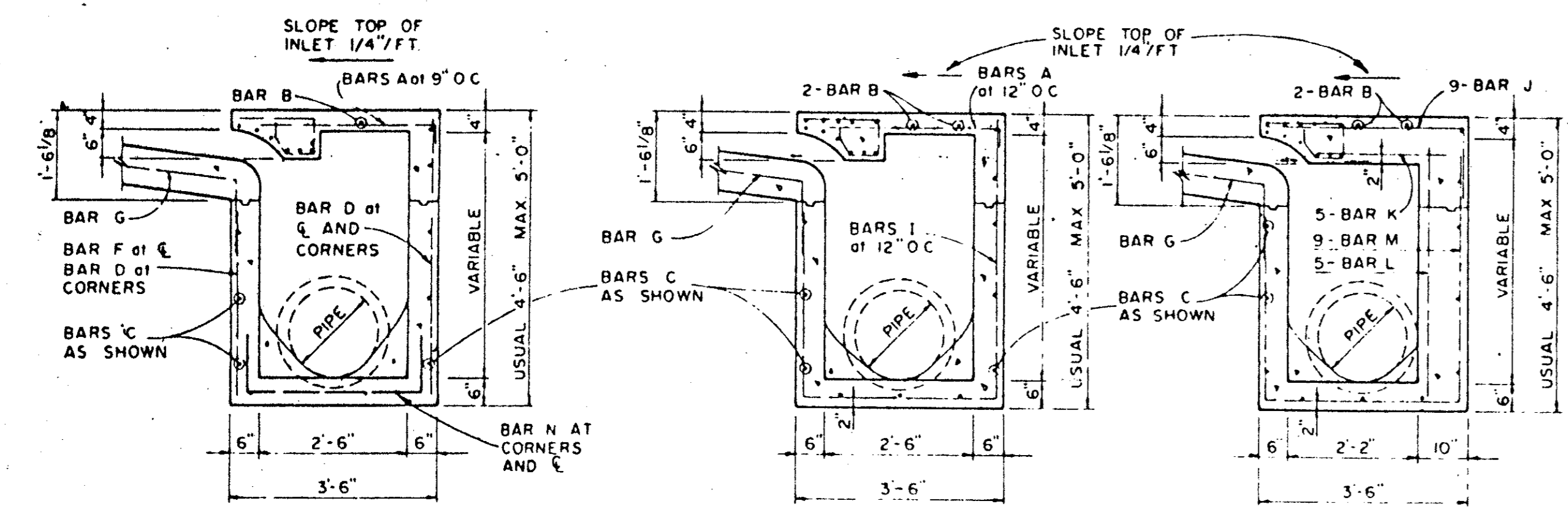


REINFORCING STEEL SCHEDULE

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"	-
6	H	3	4	-	-	-
	N	3	3	3'-2"	3'-2"	3'-2"
	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	11'-6"	-
	D	4	5	4'-8"	-	-
8	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	6	-	-	-
	N	3	3	3'-2"	3'-2"	3'-2"
	A	3	12	3'-2"	0'-3"	-
	B	3	1	6'-10"	-	-
10	C	4	15	6'-8"	11'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	6	-	-	-
	N	3	3	3'-2"	3'-2"	3'-2"
12	A	3	10	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"	-
14	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"
16	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"	-
18	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"

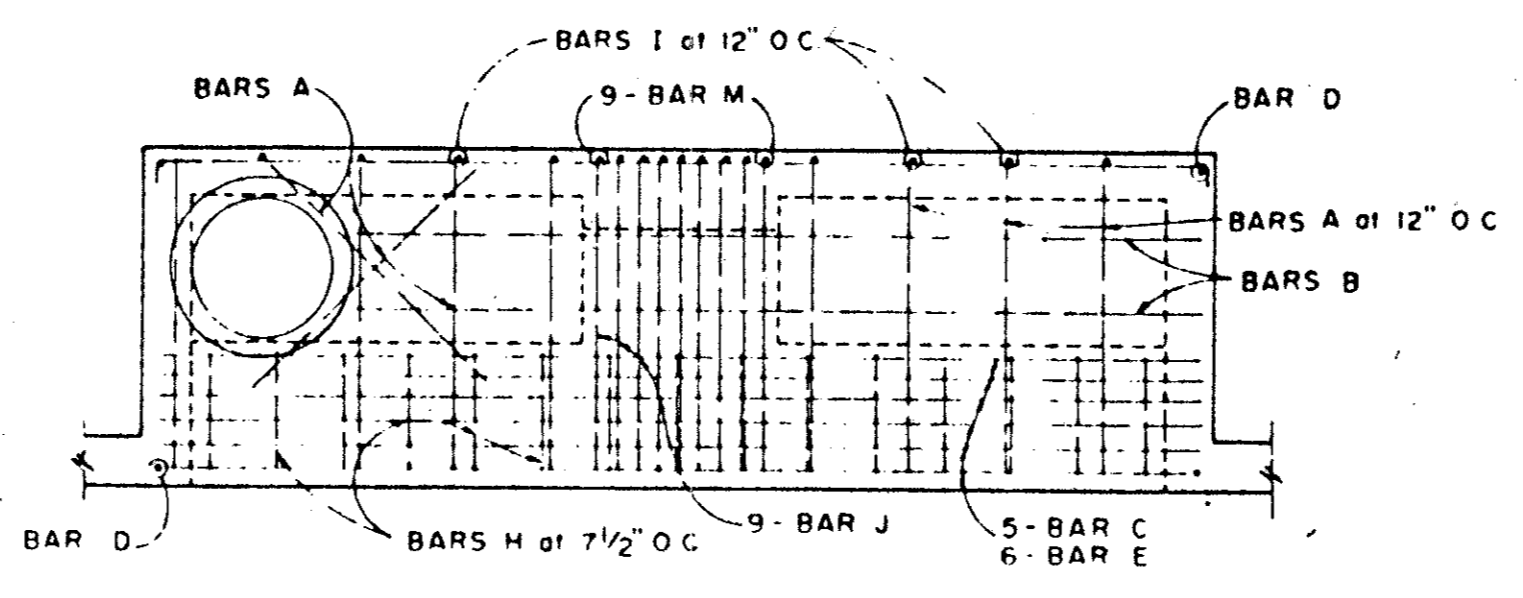
\* SEE DIAGRAM FOR DIMENSIONS



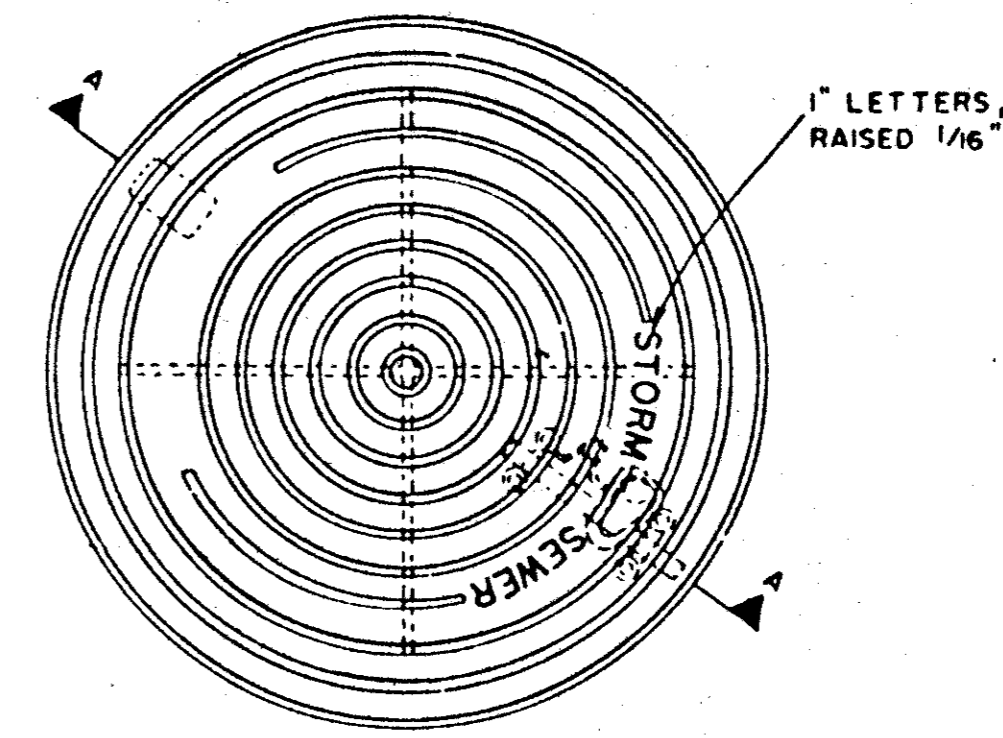
SECTION B-B

SECTION C-C

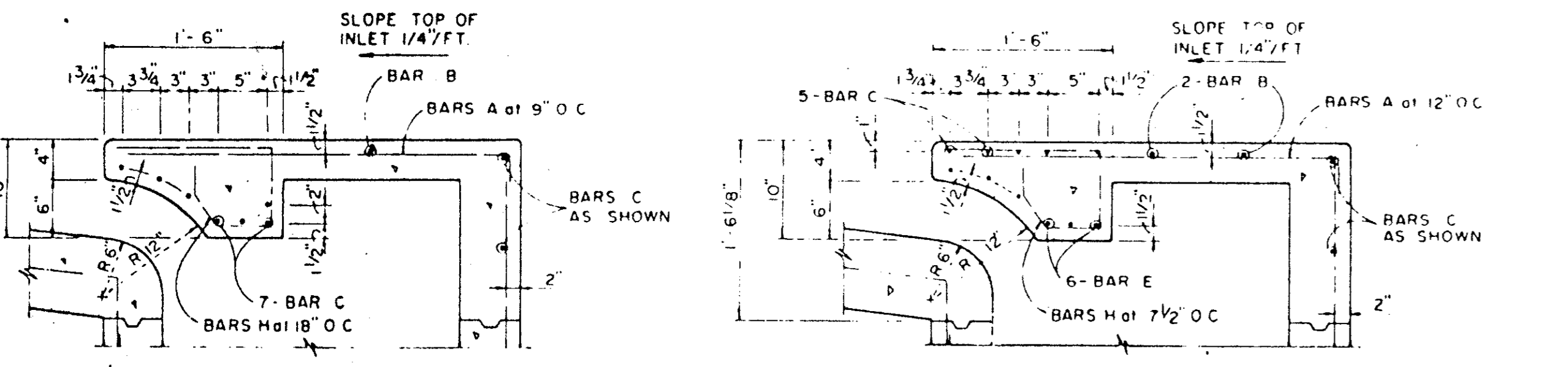
SECTION B-B



PLAN

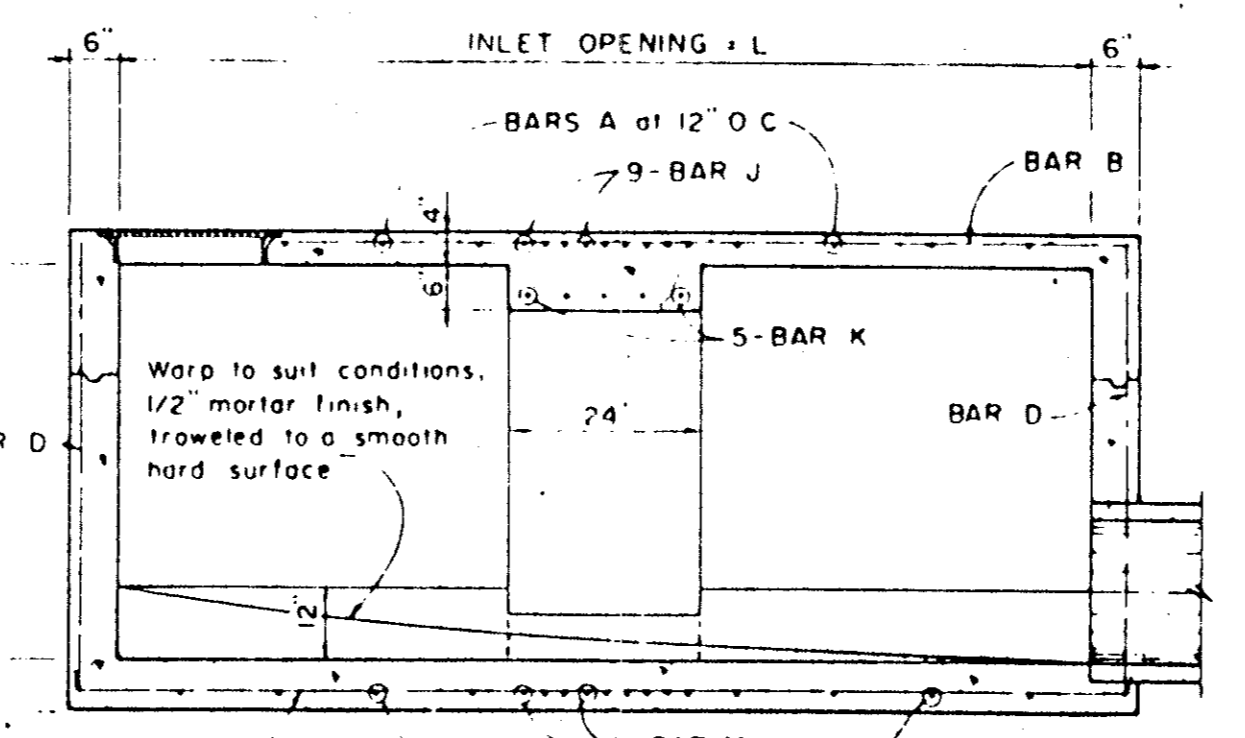


PLAN OF FRAME

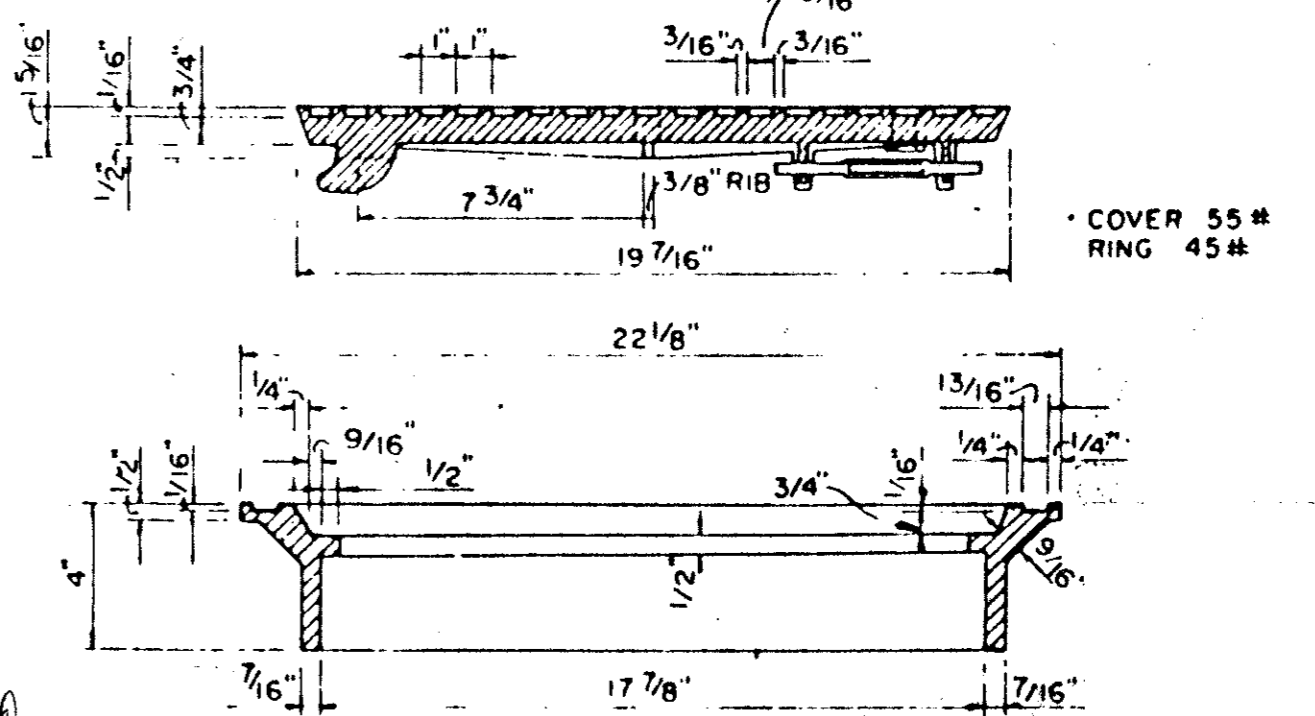


SECTION C-C

SECTION C-C



SECTION D-D FOR 12' & 14' ONLY



SECTION OF FRAME AND COVER

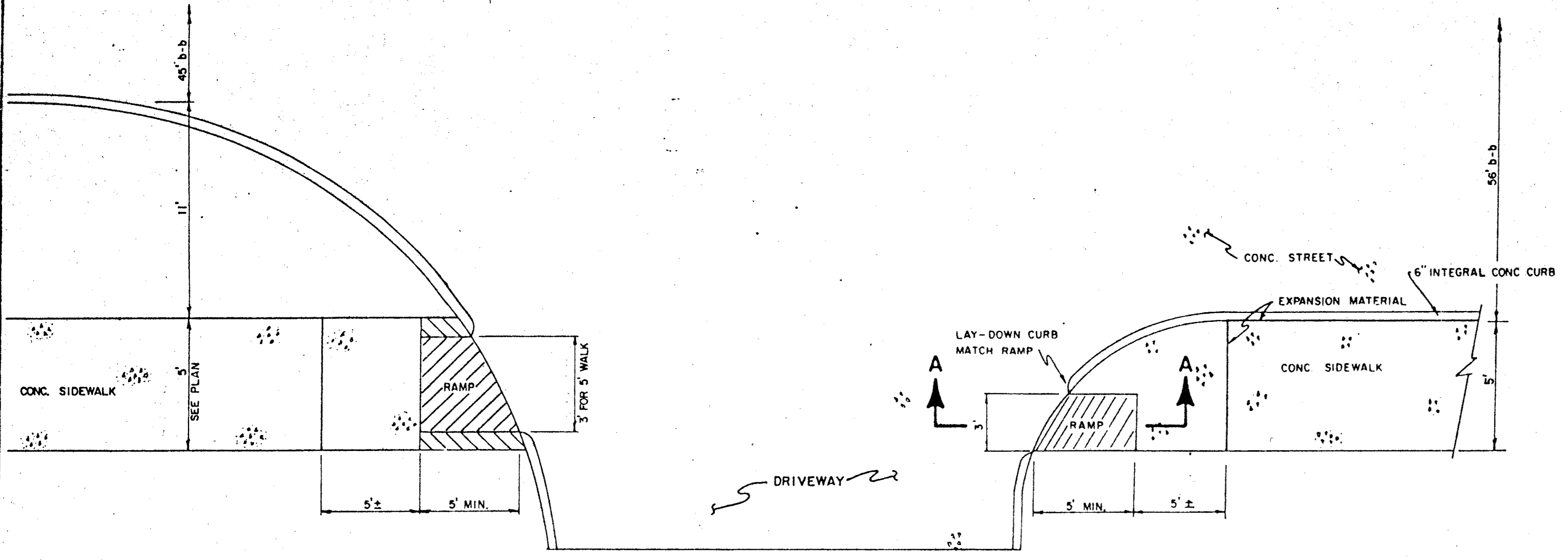
INLET FRAME AND COVER

4, 6, AND 8 FOOT INLETS

10, 12, AND 14 FOOT INLETS

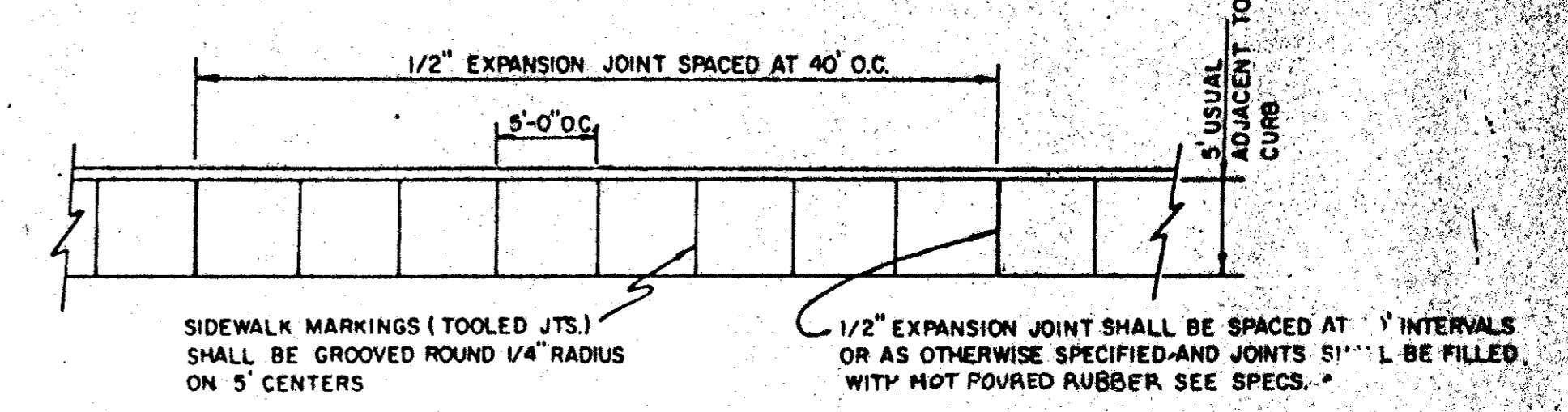
TOWN OF ADDISON, TEXAS  
DEPARTMENT OF ENGINEERING  
STANDARD CONSTRUCTION DETAIL  
STORM DRAINAGE

CURB INLETS

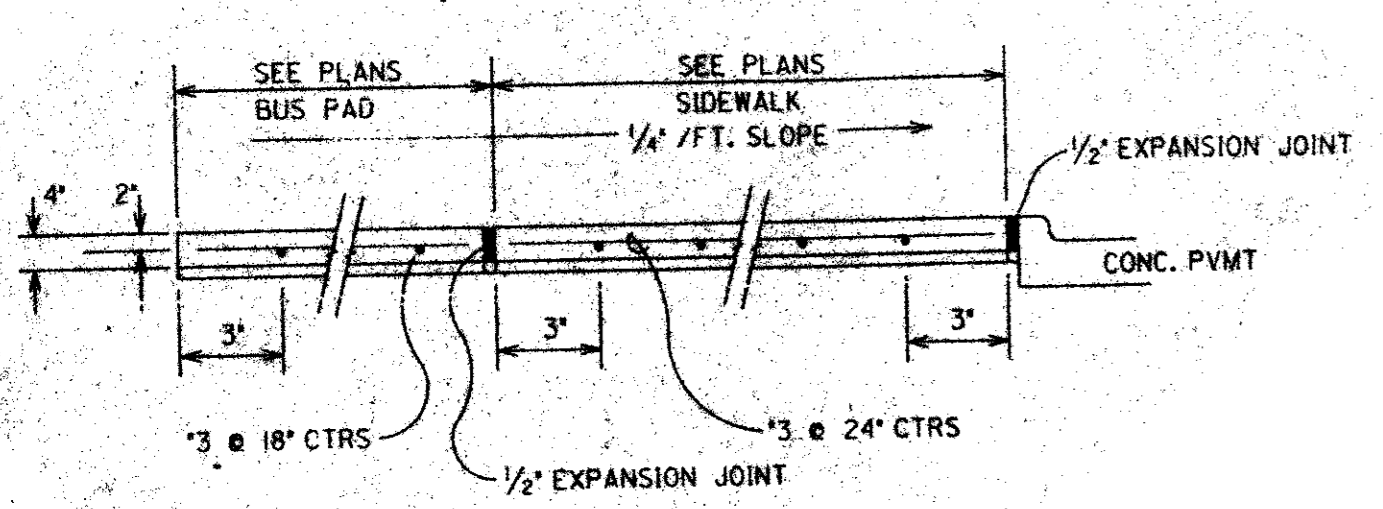


**PLAN**

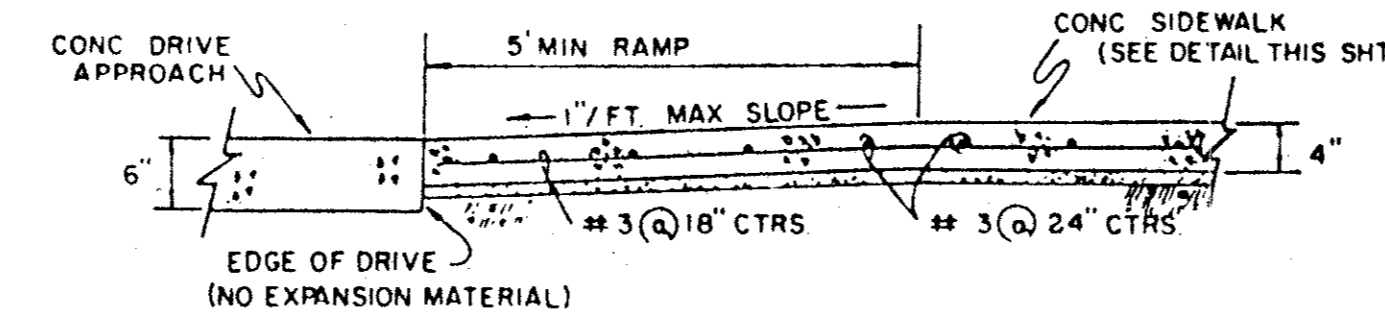
NOTE:  
MODIFY RAMP TO  
FIT DIFFERENT RADIUS



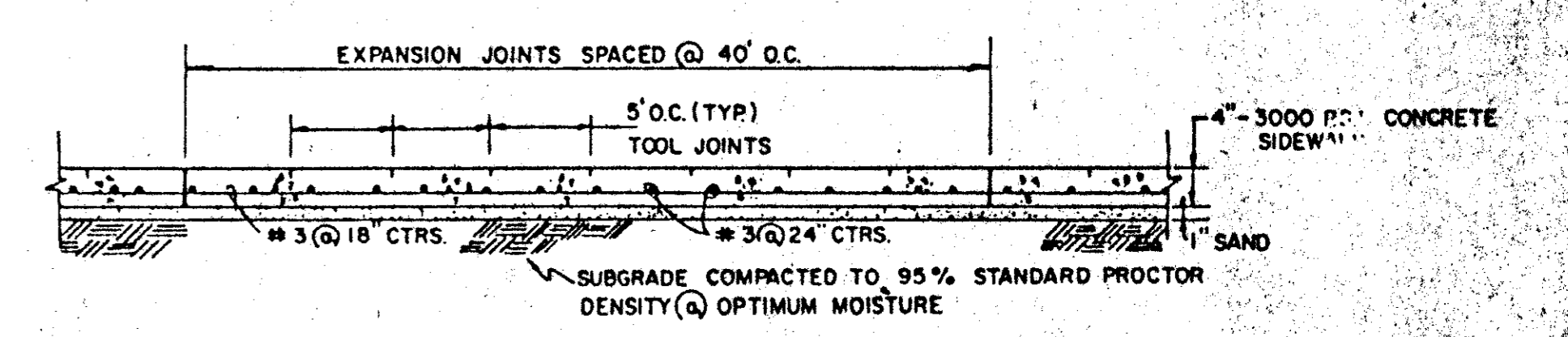
**PLAN**



**BUS PAD DETAIL**  
N.T.S.

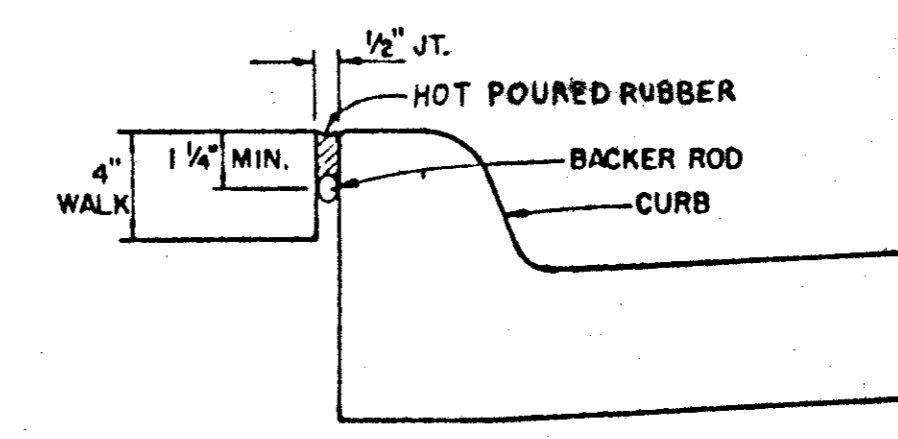


**SECTION A-A**

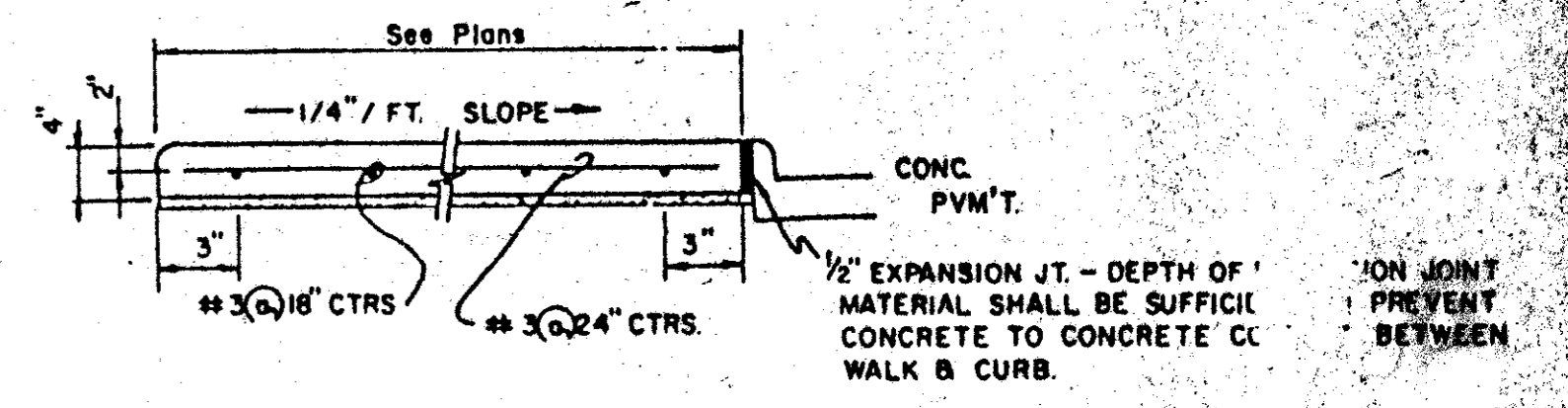


**SIDE ELEVATION**

**BARRIER-FREE RAMP DETAIL  
WITH WALK ADJACENT TO CURB**

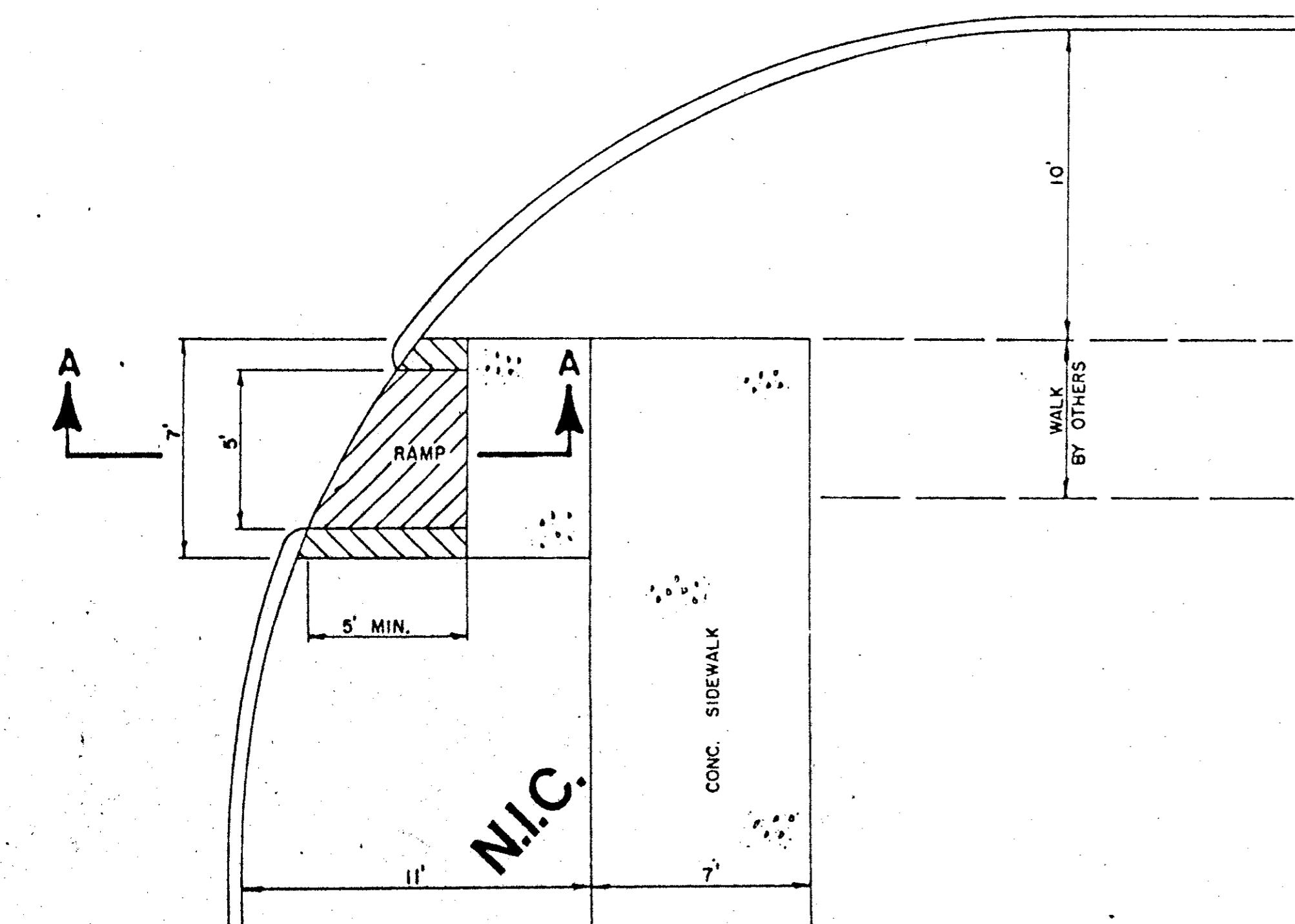


**EXPANSION JOINT DETAIL**

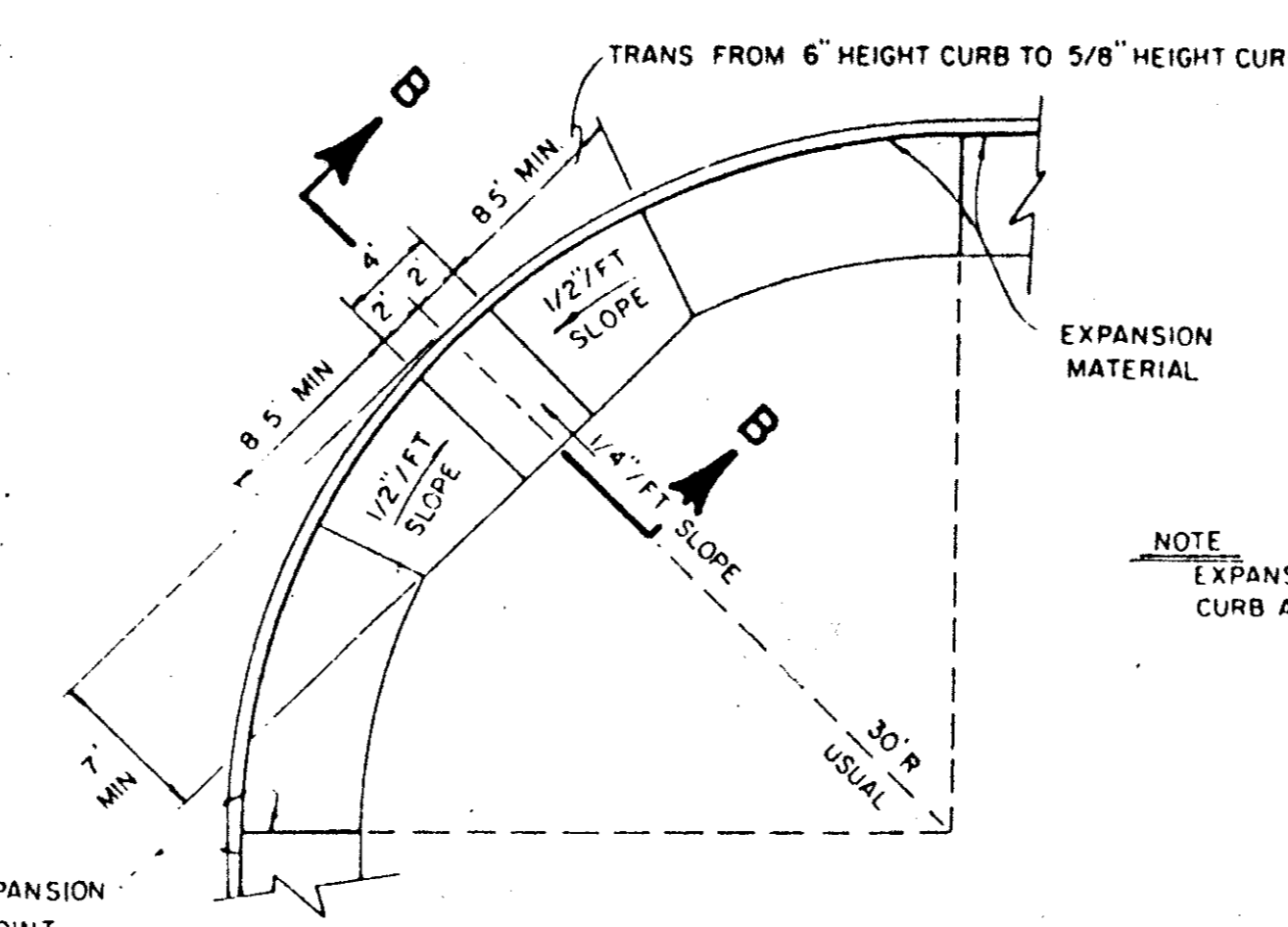


**SECTION**

**CONCRETE SIDEWALK DETAIL**

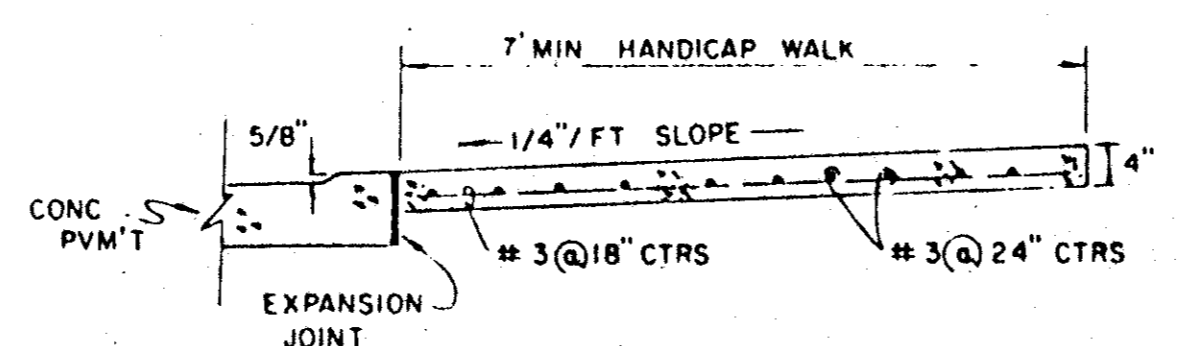


**BARRIER FREE RAMP DETAIL  
WITH WALK SEPARATE FROM CURB**



**PLAN**

NOTE:  
EXPANSION MATERIAL ALONG  
CURB AND AT CURB RETURNS

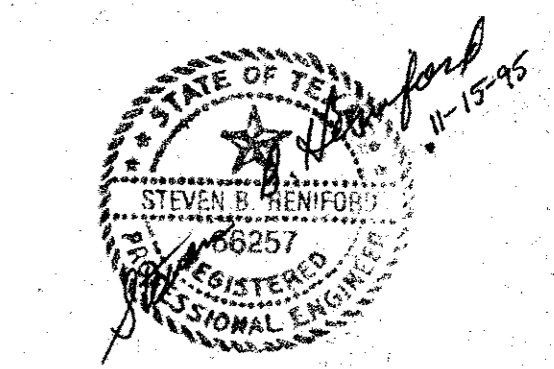


**SECTION B-B**

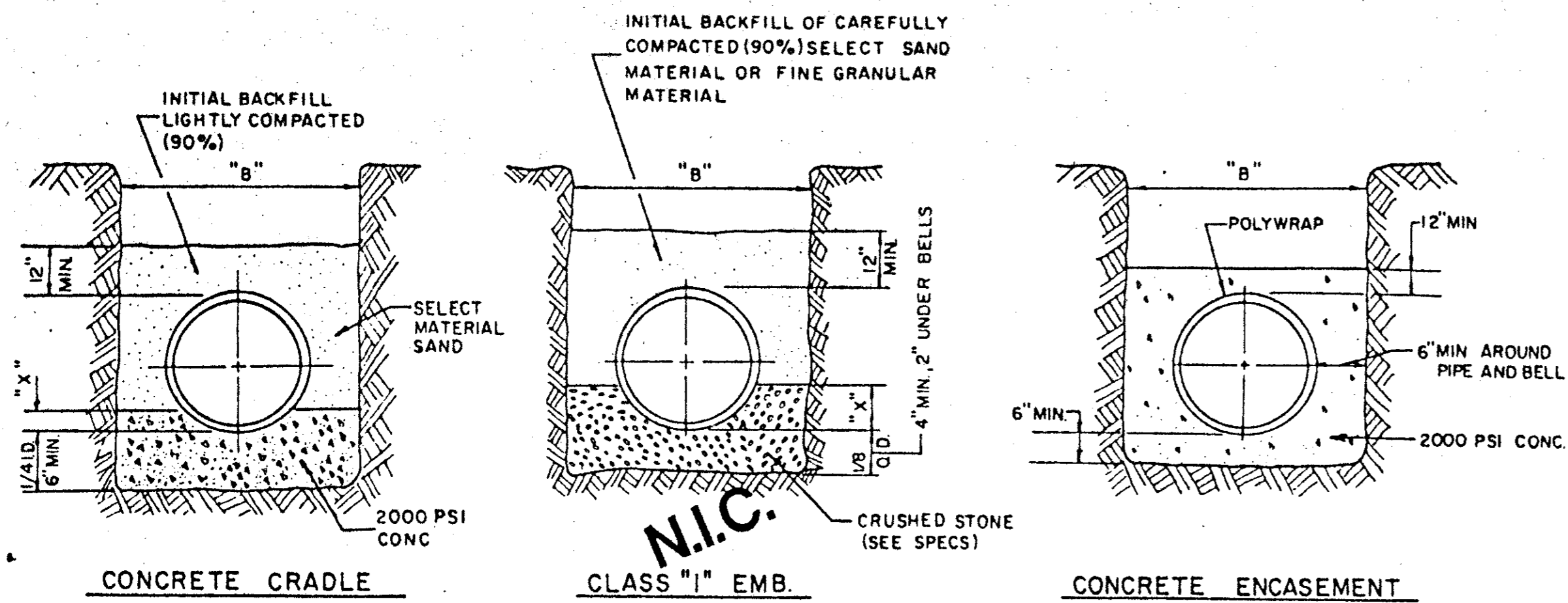
**HANDICAP ROLL-DOWN CURB DETAIL**

**GENERAL NOTES**

1. Reinforced concrete sidewalk shall be 5 or 7 feet wide, a minimum of four (4) inches thick and shall be 3000 psi at 28 days (5 sack mix). Unless noted otherwise.
2. Chamfer all exposed edges of concrete (1/4) inch.
3. All bar dimensions are given as center to center of bars and are located as shown.
4. All reinforcing steel shall be No. 3 on 18 inch centers longitudinally, 24 inch centers transversely and shall conform to the requirements of ASTM A-615, Grade 60.
5. 1" thick min. fine, washed sand cushion shall be free from organic materials or clays and shall be used for grade adjustment.
6. Subgrade shall be compacted to a density not less than 95% at optimum moisture.
7. Tooled joints (contraction joints) shall be on five (5) foot centers and shall be round one-fourth (1/4) inch radius.
8. A one-half (1/2) inch expansion joint shall be placed every eight (8) tooled joints, and where works abut old work or where new work is constructed adjacent to other concrete, a one-half inch expansion joint shall be used where sidewalk is adjacent to curb, the expansion joint shall be made of hot poured rubber.
9. Sidewalks shall be finished by lightly brooming surface transversely to direction of main traffic or where adjacent sidewalks differ from this standard, new sidewalks shall conform to adjacent sidewalk (e.g. exposed aggregate).
10. Cross slope walk one-fourth (1/4) inch per foot towards curb or as shown on the drawings to provide drainage.



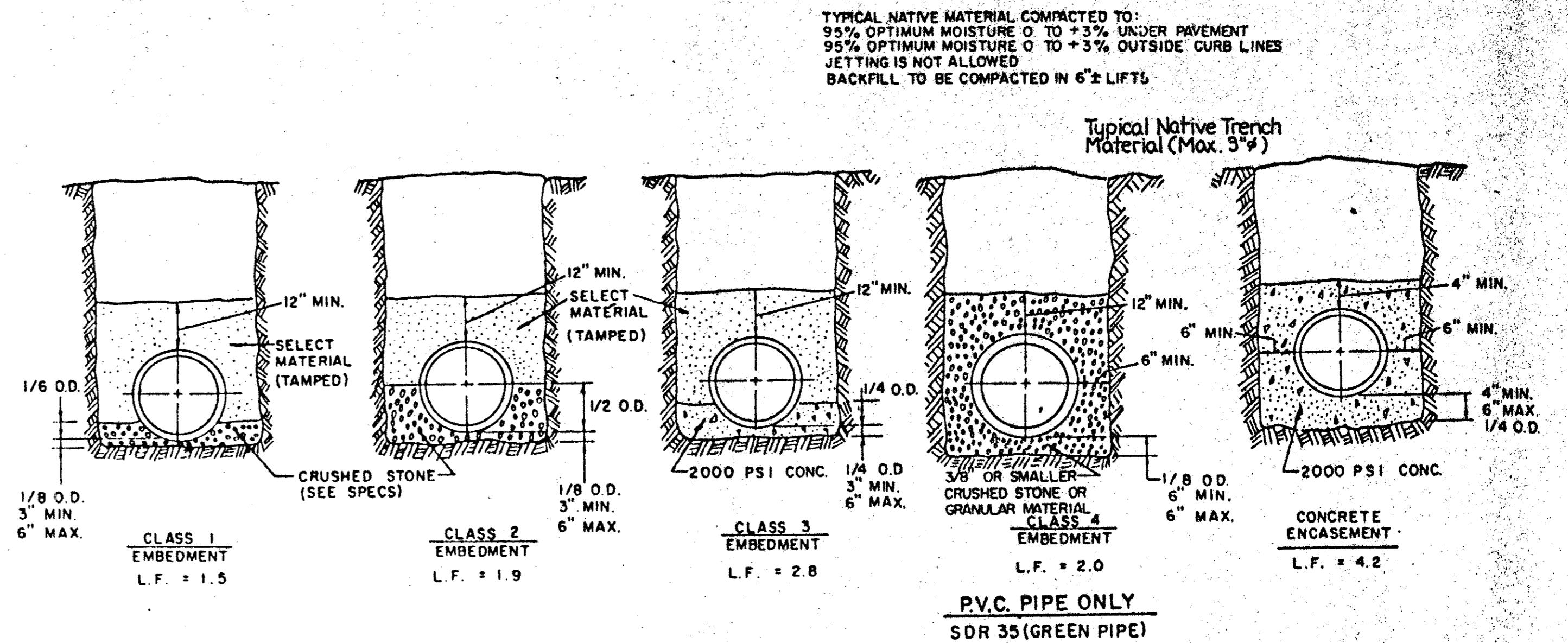
NO	REVISION	BY	DATE
TOWN OF ADDISON, TEXAS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS PAVING			
SIDEWALKS & RAMPS			
APPROVED _____			
NOV 8 1995			



**EMBEDMENT DETAILS FOR RCCP WATERLINE**

TABLE OF QUANTITIES OF MATERIALS IN CUBIC YARDS PER 100 LINEAR FEET

INSIDE DIAMETER OF PIPE	APPROX. OUTSIDE DIAMETER OF PIPE	"X" IS A MINIMUM DEPTH	"B" TRENCH WIDTH FOR COMPUTATION OF QUANTITIES	CONCRETE		CRUSHED STONE FOR CLASS "1" EMBEDMENT
				FOR EMBEDMENT	FOR ENCASEMENT	
REINFORCED CONCRETE CYLINDER PIPE						
14"	17.25"	2.53"	34"	6.91	16.07	5.16
16"	19.38"	2.84"	36"	7.50	17.76	5.64
18"	21.78"	3.19"	38"	8.11	19.52	6.16
24"	27.75"	4.06"	44"	9.97	24.90	9.28



**EMBEDMENT DETAILS FOR SANITARY SEWER**

TABLE OF QUANTITIES OF 2000 PSI CONCRETE, GRAVEL OR CRUSHED STONE IN CUBIC YARDS PER 100 LINEAR FEET FOR EACH CLASS EMBEDMENT

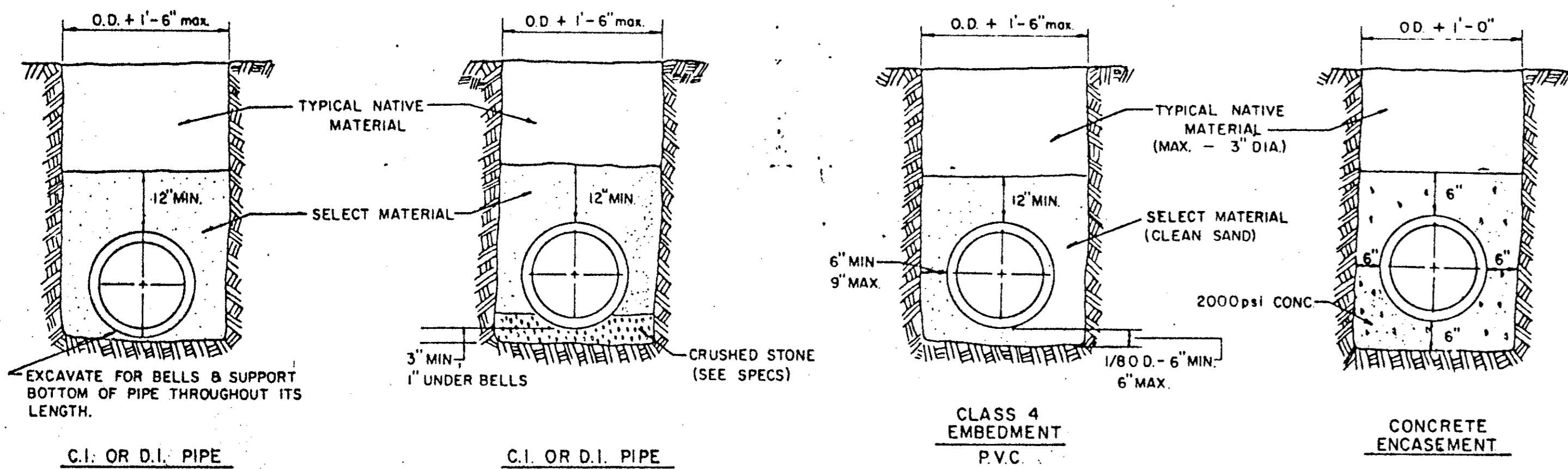
TABLE OF QUANTITIES PER 100 LINEAR FEET REINFORCED CONCRETE PIPE

SIZE OF PIPE IN INCHES I.D.	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 1 EMBEDMENT CRUSHED STONE	CLASS 2 EMBEDMENT CRUSHED STONE	CLASS 3 EMBEDMENT CONCRETE	CONCRETE ENCASEMENT
12	16.00	32	2.67	4.1	6.5	4.8	15.8
15	19.50	36	3.00	4.8	7.8	6.4	19.2
18	23.00	39	3.25	5.7	9.2	8.2	21.2
21	26.50	43	3.58	6.9	11.0	10.2	24.9
24	30.00	46	3.83	8.3	13.1	12.4	28.7
27	33.50	51	4.25	10.3	16.1	14.4	32.8
30	37.00	57	4.75	12.7	20.1	17.0	34.8
33	40.50	62	5.17	15.1	23.8	19.3	39.2
36	44.00	67	5.58	18.0	28.6	22.1	43.8

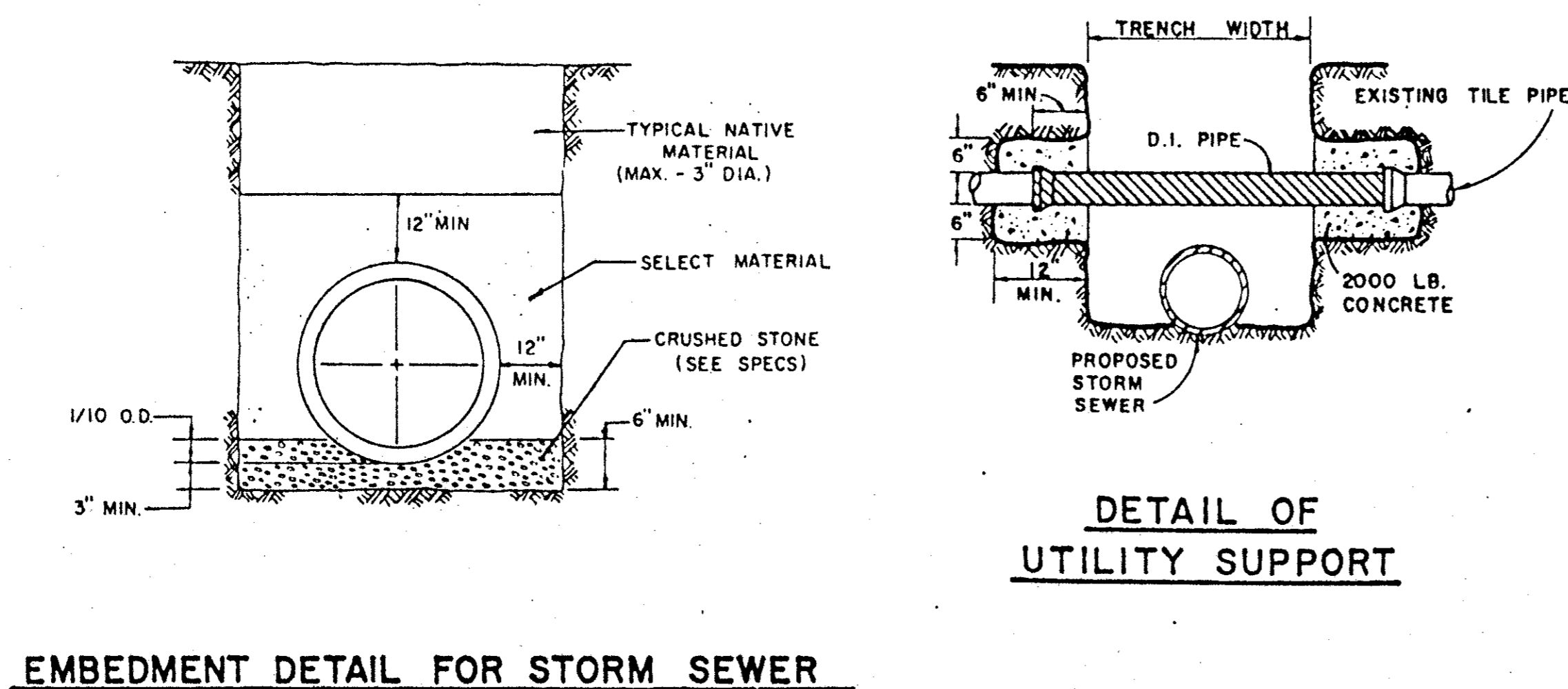
TABLE OF QUANTITIES PER 100 LINEAR FEET-PVC PIPE (IN CUBIC YARDS)

SIZE OF PIPE IN INCHES	O.D. OF PIPE IN INCHES	TRENCH WIDTH IN INCHES	TRENCH WIDTH IN FEET	CLASS 4 EMBEDMENT CRUSHED STONE	CONCRETE ENCASEMENT
6	6.28	24	2.00	8.0	11.7
8	8.16	24	2.00	8.7	12.4
10	10.20	26	2.18	10.2	14.2
12	12.24	28	2.35	11.7	15.9
16	15.30	31	2.61	14.0	18.8
24		36	3.0		
30		42	3.5		

NOTE: ALL SANITARY SEWER LINES THIS PROJECT SHALL HAVE CLASS 4 EMBEDMENT UNLESS OTHERWISE NOTED.

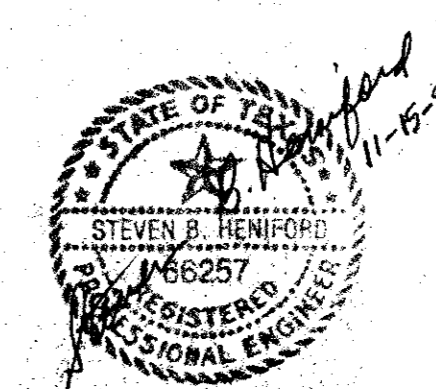
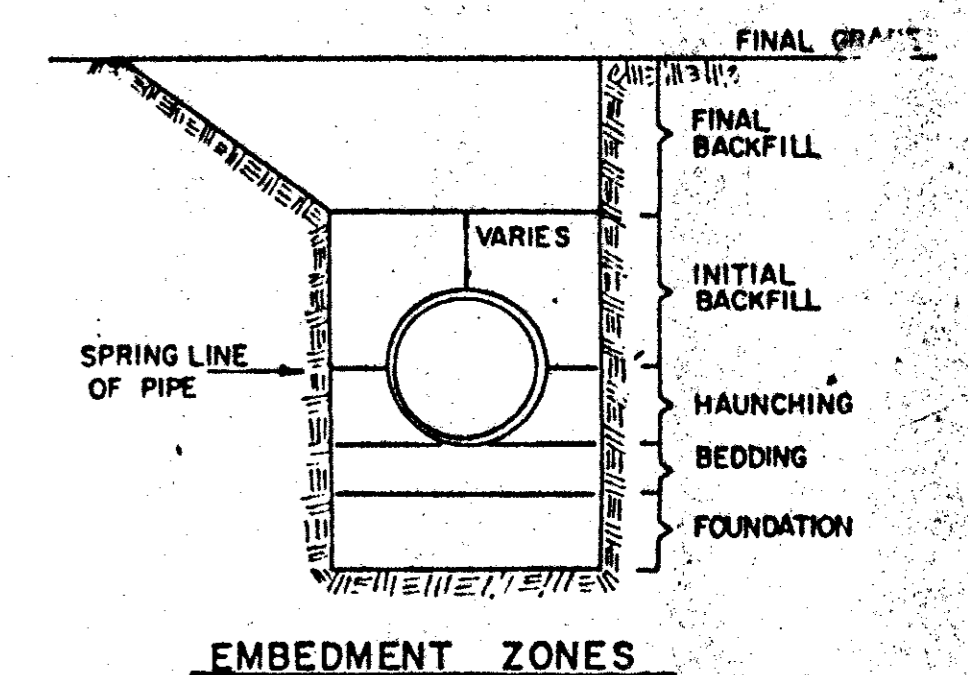


**EMBEDMENT DETAILS FOR WATER MAIN**



**EMBEDMENT DETAIL FOR STORM SEWER**

**DETAIL OF UTILITY SUPPORT**

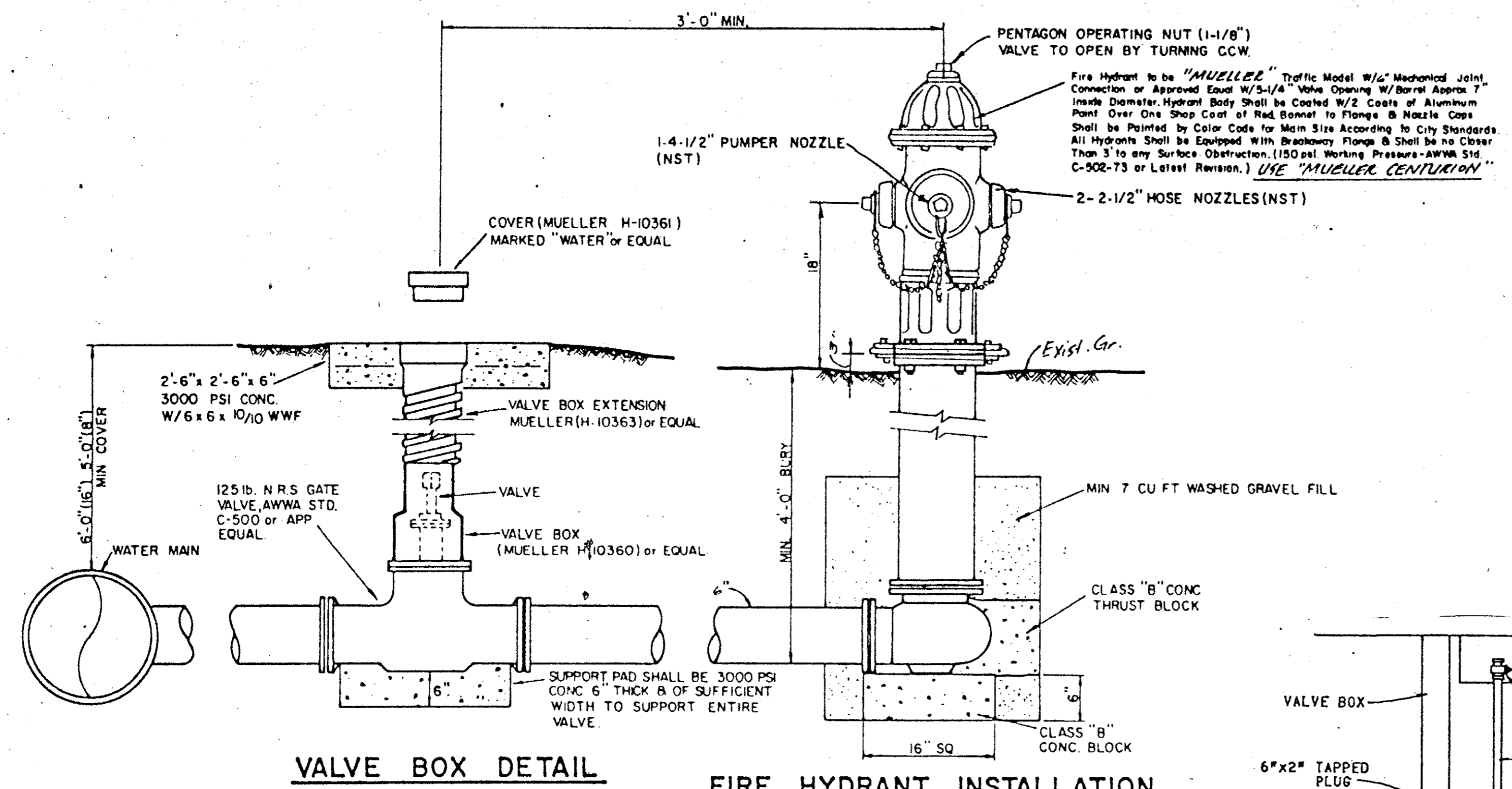


TOWN OF ADDISON, TEXAS  
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS  
EMBEDMENT DETAILS

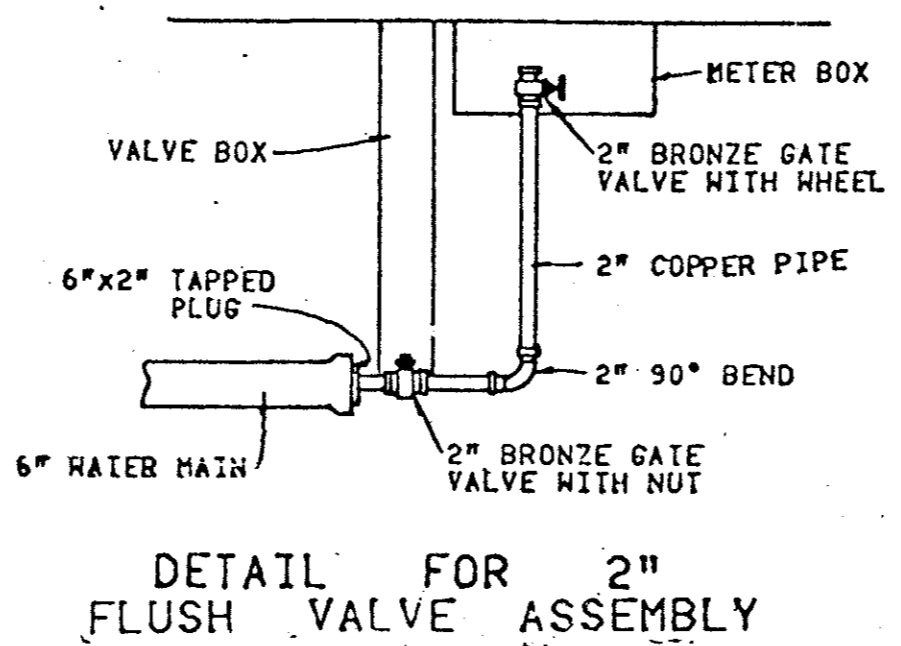
Designed -	Drawn -	Date - AUGUST, 1991	Job No. -
Approved -	Checked -	Scale -	Sheet -



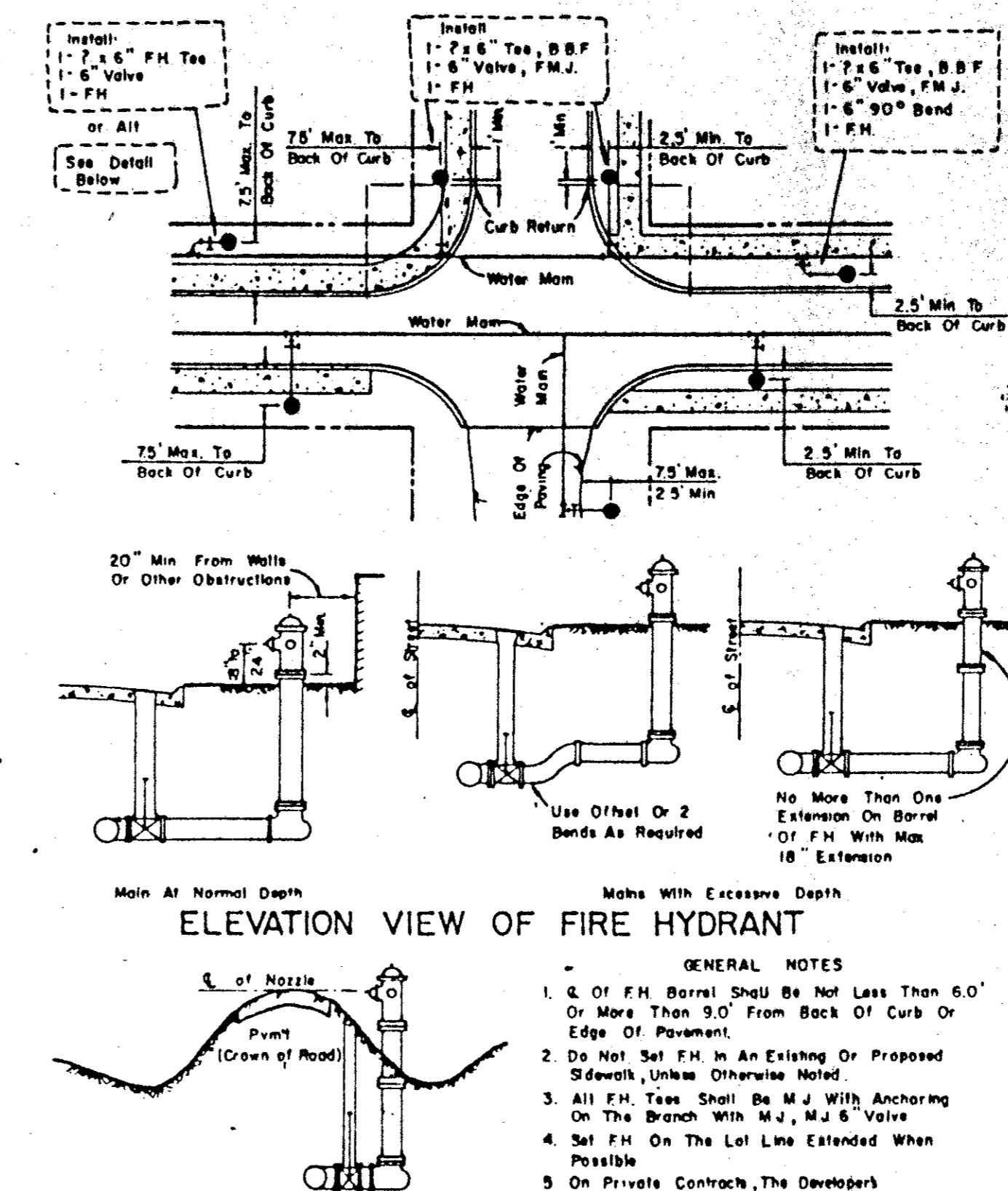


**VALVE BOX DETAIL**  
(SEE PLANS FOR "MAIN SIZE")

**FIRE HYDRANT INSTALLATION**  
(INCLUDES 6" VALVE)  
No Scale

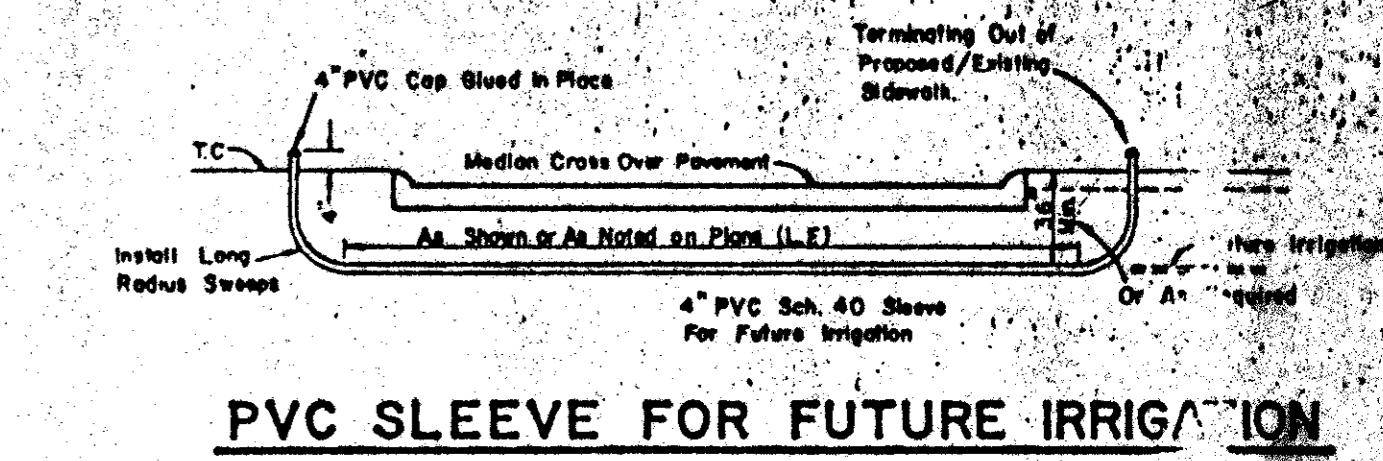


**DETAIL FOR 2" FLUSH VALVE ASSEMBLY**

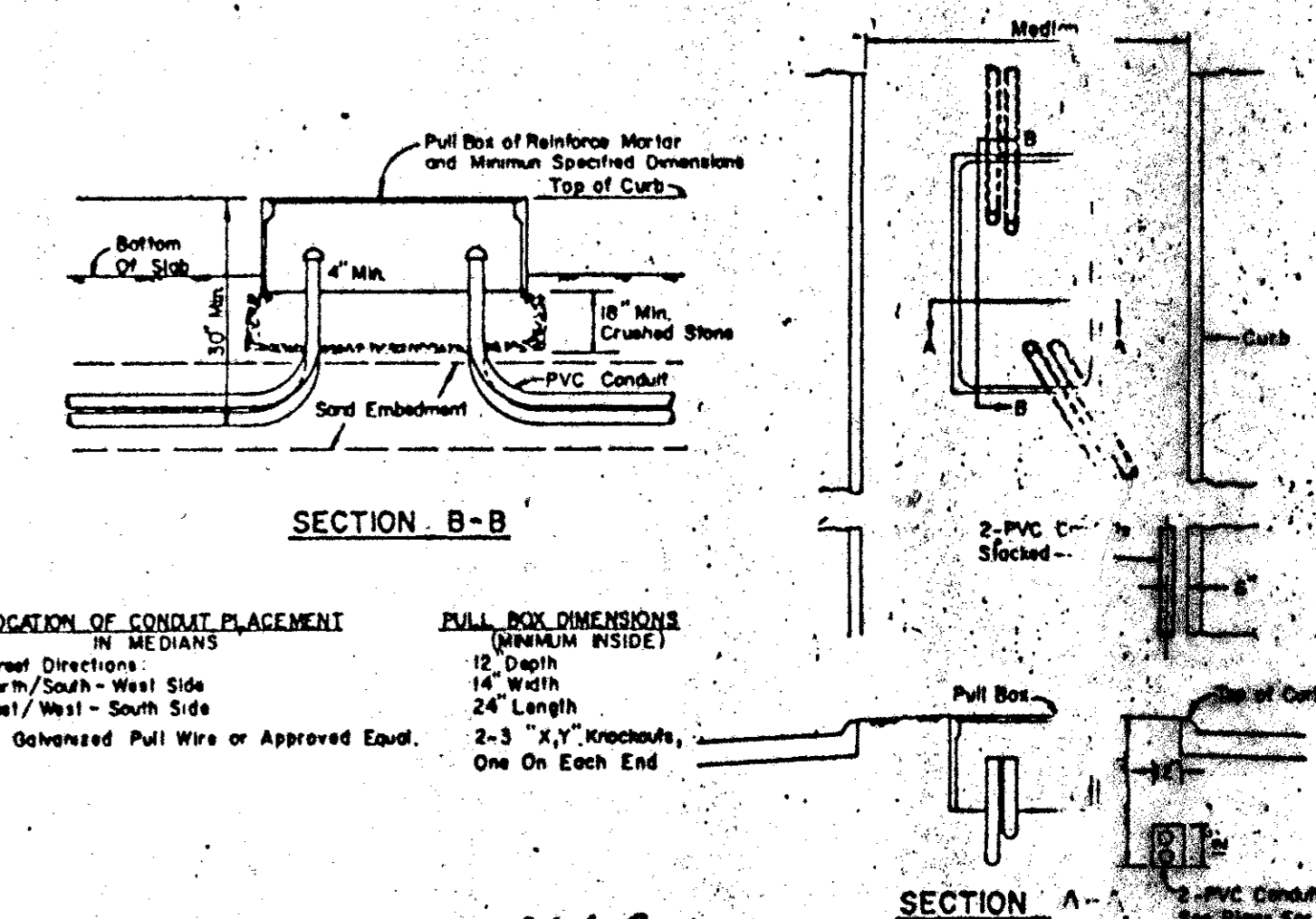


**ELEVATION VIEW OF FIRE HYDRANT**

- GENERAL NOTES**
1. G. of F.H. Barrel Shall Be Not Less Than 6.0' Or More Than 9.0' From Back Of Curb Or Edge Of Pavement.
  2. Do Not Set F.H. in An Existing Or Proposed Sidewalk, Unless Otherwise Noted.
  3. All F.H. Tees Shall Be M.J. With Anchoring On The Branch With M.J. M.J. 6" Valve.
  4. Set F.H. On The Low Side Extended When Possible.
  5. On Private Contracts, The Developer/Engineer Will Stake Location & Grade.
  6. Never Place F.H. Where Fire Truck Could Not Park Beside It!

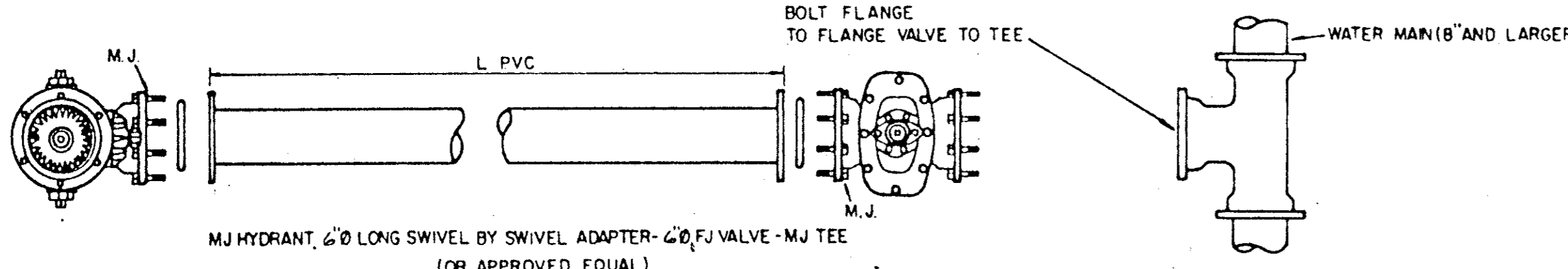


**PVC SLEEVE FOR FUTURE IRRIGATION**  
N.I.C.

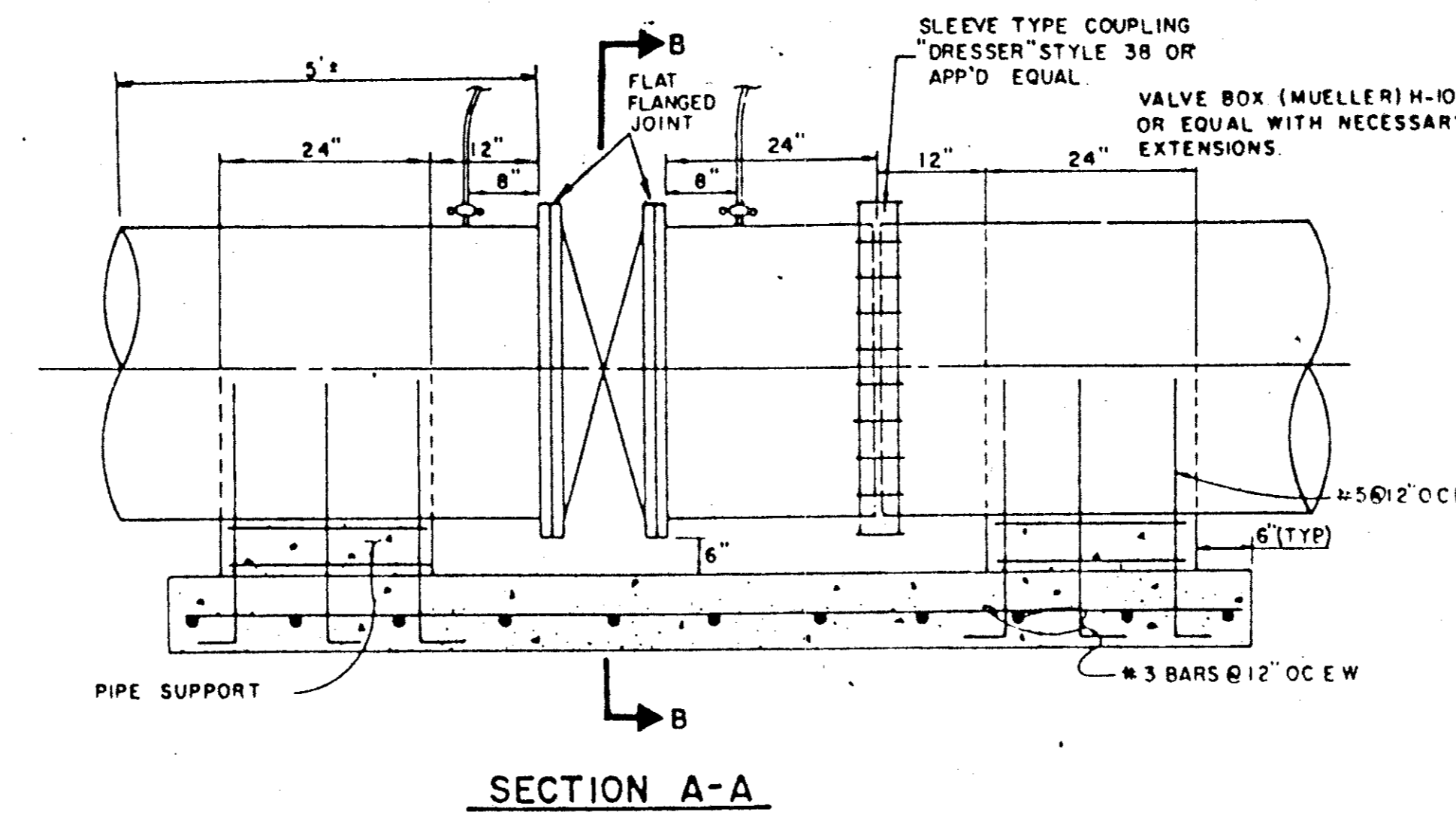


**PULL BOX & CONDUIT DETAIL**  
N.I.C.

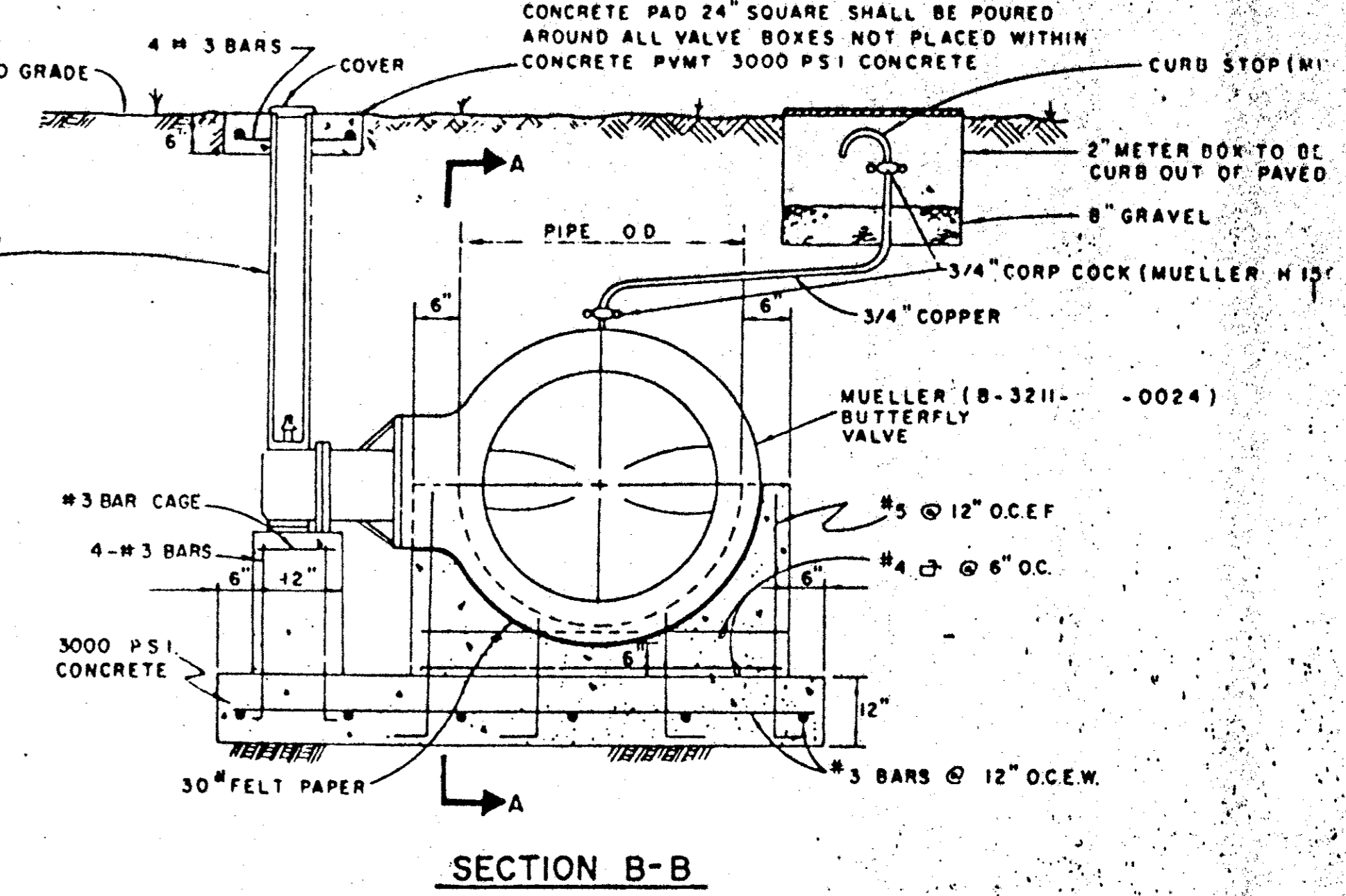
- GATE VALVES AND VALVE BOXES.**
1. GATE VALVES SHALL BE IRON BODY, BRONZE OR BRASS MOUNTED, NON-RISING STEM, PARALLEL SEAT TYPE. VALVES SHALL BE OF EQUAL OR GREATER PRESSURE CLASS THAN THE PIPING IN WHICH THEY ARE TO BE INSTALLED.
  2. VALVE BOXES SHALL BE CAST IRON AND SHALL BE OF SUFFICIENT LENGTH 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.



**TYPICAL FIRE HYDRANT INSTALLATION**

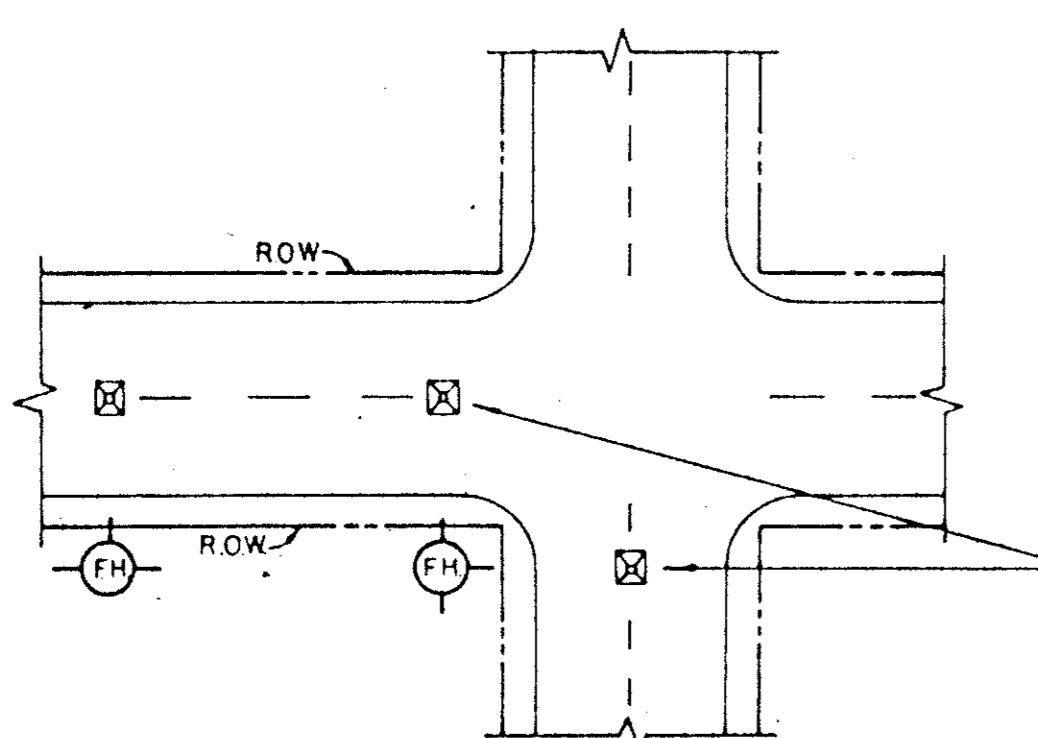


**SECTION A-A**



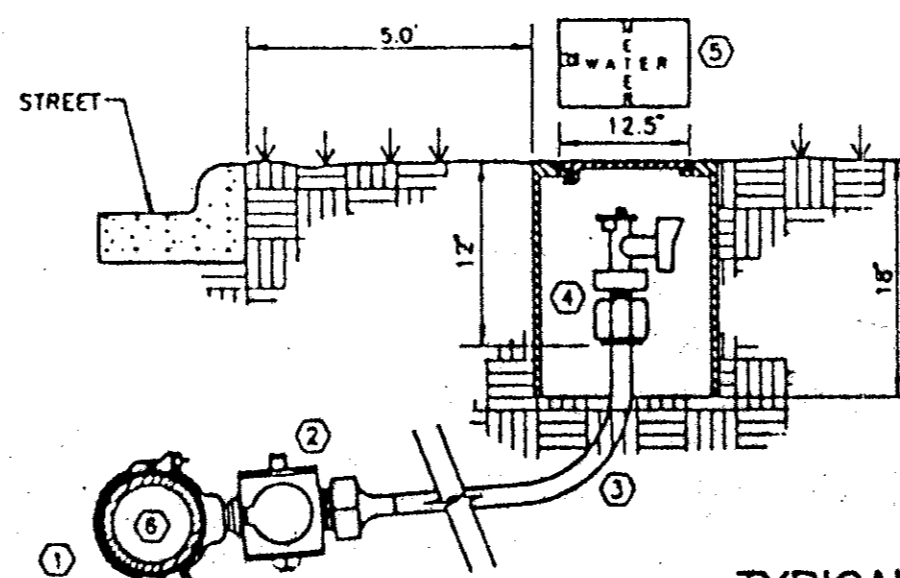
**SECTION B-B**

**BUTTERFLY VALVE DETAIL**  
N.I.C.



**TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION**

A BLUE STIMSONITE FIRE-LITE REFLECTOR (OR APPROVED EQUAL) TO BE PLACED IN THE CENTER OF STREET OPPOSITE FIRE HYDRANTS. THE INSTALLATION OF THIS REFLECTOR SHALL BE AS PRESCRIBED BY THE MANUFACTURER.



**TYPICAL WATER SERVICE DETAIL**

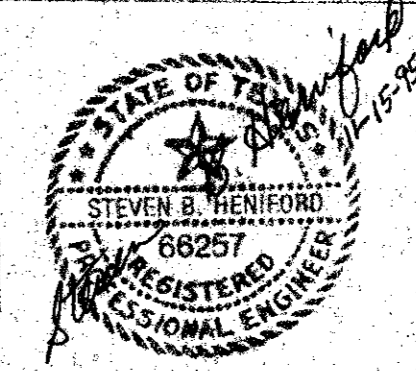
1. DOUBLE STRAP BRONZE SADDLE W/CCW THREADS. MUELLER.
2. CORPORATION STOP W/CCW THREADS. MUELLER H-15008 COMPRESSION OR H-15000 FLARED.
3. 1" TYPE "X" SOFT COPPER W/NO SPLICES
4. ANGLE STOP W/LOCK WING. MUELLER H-14258 COMPRESSION OR H-14255 FLARED.
5. WATER METER BOX (RECTANGULAR SHAPE ONLY) CONCRETE OR METAL SHELL CONSTRUCTION
6. WATER MAIN PVC AWWA C900 SDR 14/18 INTEGRAL WALL BELL

TOWN OF ADDISON, TEXAS  
DEPARTMENT OF ENGINEERING

**STANDARD CONSTRUCTION DETAILS**

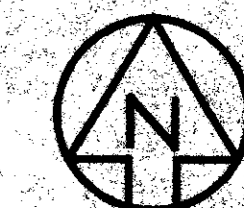
**WATER**

**FIRE HYDRANTS, PULL BOXES AND VALVES**



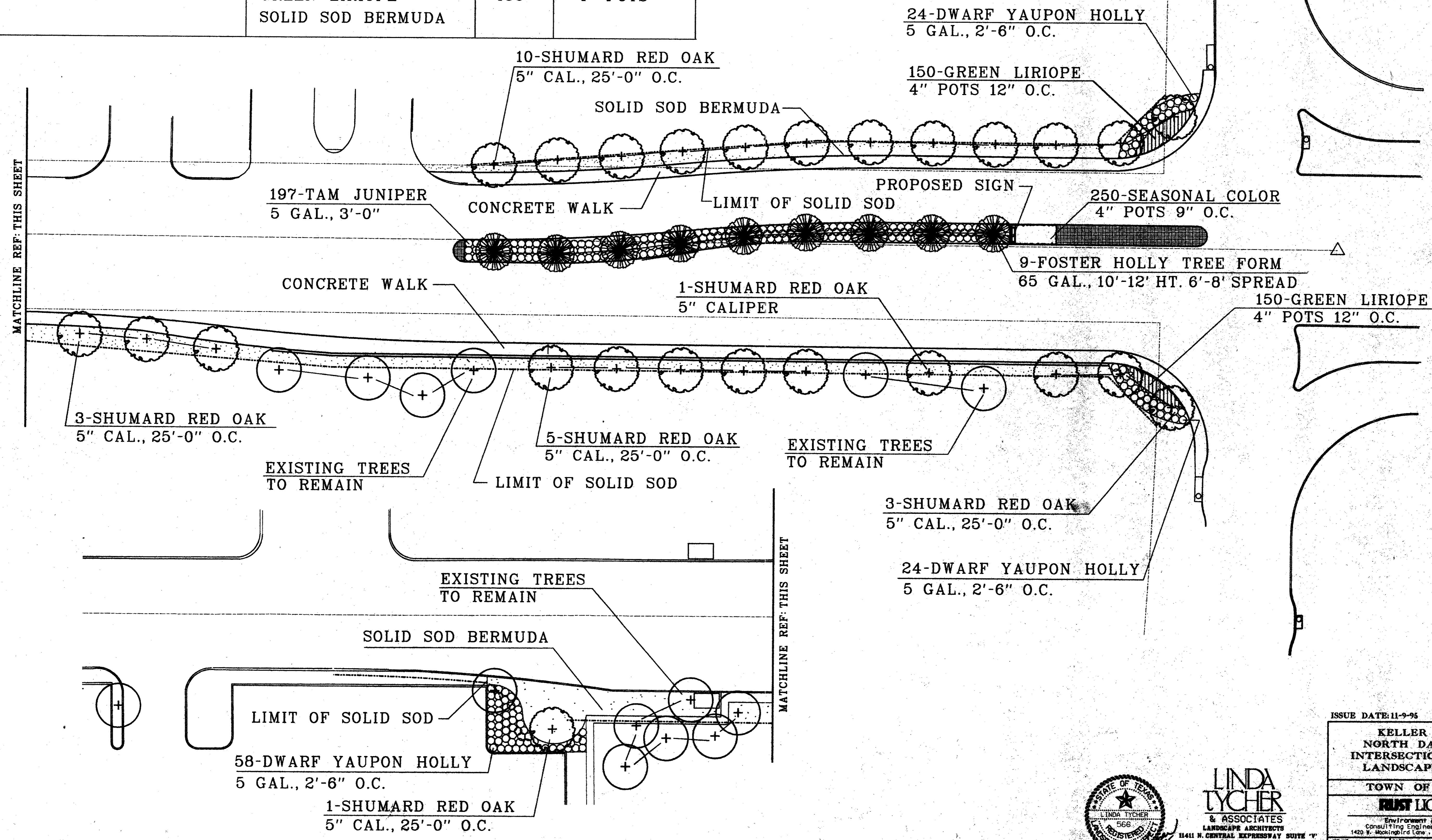
Designed -	Drawn -	Date - 10/15/2025	Job No. -
Approved -	Checked -	Scale -	Sheet 14 OF 14

NO.	DATE	DESCRIPTION	BY



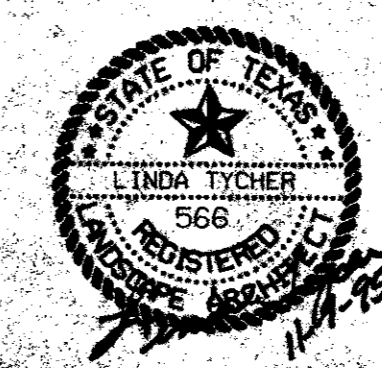
PLANT LIST

BOTANICAL NAME	COMMON NAME	QTY.	SIZE
<b>TREES:</b>			
QUERCUS SHUMARDII	SHUMARD RED OAK	22	5" CALIPER
ILEX X ATTENUATA 'FOSTERI'	FOSTER HOLLY	9	65 GALLON
<b>SHRUBS:</b>			
ILEX VOMITORIA NANA	DWARF YAUPON HOLLY	107	5 GALLON
JUNIPERUS SABINA TAMARISCIFOLIA	TAM JUNIPER	197	5 GALLON
<b>GROUND COVER:</b>			
SEASONAL COLOR	SEASONAL COLOR	250	4" POTS
LIRIOPE MUSCARI	GREEN LIRIOPE	450	4" POTS
TURF	SOLID SOD BERMUDA		



MATCHLINE REF. THIS SHEET

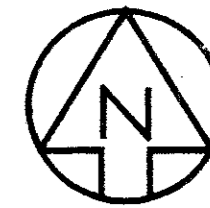
MATCHLINE REF. THIS SHEET



**LINDA TYCHER**  
& ASSOCIATES  
LANDSCAPE ARCHITECTS  
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247-4906  
DALLAS, TEXAS 75243  
PH: 214-750-1810 FAX: 214-381-0727

ISSUE DATE: 11-9-95			
KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS LANDSCAPE MASTER PLAN			
TOWN OF ADDISON, TEXAS			
<b>RUST LICHTER/JAMESON</b>			
<small>Environment &amp; Infrastructure Consulting Engineers, Scientists and Planners 1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247-4906</small>			
JOB NO. 67915.001	DATE 8-22-95	DRAWN BY JB	CHECKED BY LT
CAD FILE	CAD DATE	SCALE 1" = 20'-0"	SHEET 1 OF 3

NO.	DATE	DESCRIPTION	BY

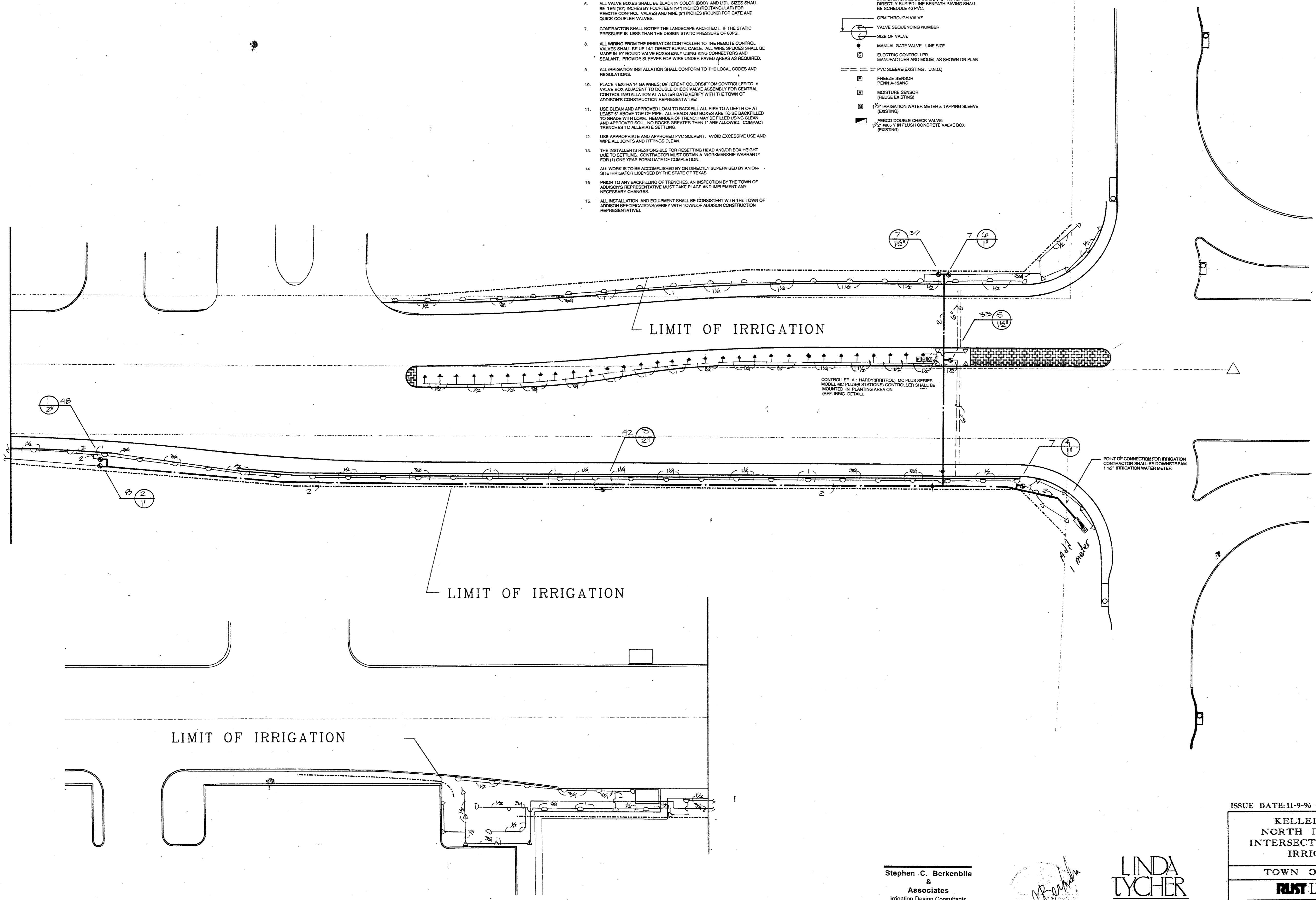


**IRRIGATION NOTES**

1. LINE LAYOUT IS DIAGRAMMATIC - ADJUST HEAD AND LINE LOCATIONS ON SITE TO ACCOMMODATE EXISTING JOB CONDITIONS AND TO ACHIEVE COMPLETE COVERAGE.
2. ALL MAIN LINE PIPING SHALL BE BURIED TO HAVE A MINIMUM COVER OF 18". ALL LATERAL PIPING DOWNSTREAM OF THE MAIN LINE SHALL BE BURIED TO HAVE A MINIMUM COVER OF 12".
3. ALL MAINS ARE TO DRAIN TO LOW POINTS AT A MINIMUM ONE HALF (1/2%) PERCENT SLOPE. AT LOW POINTS, INSTALL GATE VALVE TO FACILITATE DRAINAGE OF SYSTEM DURING FREEZING TEMPERATURES.
4. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO SYSTEM LAYOUT IN THE FIELD TO INSURE POSITIVE DRAINAGE OF MAINS AND LATERALS.
5. CONTRACTOR SHALL INSTALL AUTOMATIC DRAIN VALVES AT LOW POINTS IN THE IRRIGATION LINES AS REQUIRED TO PREVENT FREEZE DAMAGE.
6. ALL VALVE BOXES SHALL BE BLACK IN COLOR (BODY AND LID). SIZES SHALL BE TEN (10) INCHES BY FIFTEEN (15) INCHES (RECTANGULAR) FOR REMOTE CONTROL VALVES AND NINE (9) INCHES (ROUND) FOR GATE AND QUICK COUPLER VALVES.
7. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, IF THE STATIC PRESSURE IS LESS THAN THE DESIGN STATIC PRESSURE OF 80PSI.
8. ALL WIRING FROM THE IRRIGATION CONTROLLER TO THE REMOTE CONTROL VALVES SHALL BE #14 DIRECT BURIAL CABLE. ALL WIRE SPLICES SHALL BE MADE IN 1" ROUND VALVE BOXES AND Y USING KING CONNECTORS AND SEALANT. PROVIDE SLEEVES FOR WIRE UNDER PAVES AREAS AS REQUIRED.
9. ALL IRRIGATION INSTALLATION SHALL CONFORM TO THE LOCAL CODES AND REGULATIONS.
10. PLACE 4 EXTRA 14 GA WIRES (DIFFERENT COLORS) FROM CONTROLLER TO A VALVE BOX ADJACENT TO DOUBLE CHECK VALVE ASSEMBLY FOR CENTRAL CONTROL INSTALLATION AT A LATER DATE (VERIFY WITH THE TOWN OF ADDISON'S CONSTRUCTION REPRESENTATIVE).
11. USE CLEAN AND APPROVED LOAM TO BACKFILL ALL PIPE TO A DEPTH OF AT LEAST 6" ABOVE TOP OF PIPE. ALL HEADS AND BOXES ARE TO BE BACKFILLED TO GRADE WITH LOAM. REMAINDER OF TRENCH MAY BE FILLED USING CLEAN AND APPROVED SOIL. NO ROCKS GREATER THAN 1" ARE ALLOWED. COMPACT TRENCHES TO ALEVATE SETTLING.
12. USE APPROPRIATE AND APPROVED PVC SOLVENT. AVOID EXCESSIVE USE AND WIPE ALL JOINTS AND FITTINGS CLEAN.
13. THE INSTALLER IS RESPONSIBLE FOR RESETTING HEAD AND/OR BOX HEIGHT DUE TO SETTLING. CONTRACTOR MUST OBTAIN A WORKMANSHIP WARRANTY FOR (1) ONE YEAR FROM DATE OF COMPLETION.
14. ALL WORK IS TO BE ACCOMPLISHED BY OR DIRECTLY SUPERVISED BY AN ON-SITE IRRIGATOR LICENSED BY THE STATE OF TEXAS.
15. PRIOR TO ANY BACKFILLING OF TRENCHES, AN INSPECTION BY THE TOWN OF ADDISON'S REPRESENTATIVE MUST TAKE PLACE AND IMPLEMENT ANY NECESSARY CHANGES.
16. ALL INSTALLATION AND EQUIPMENT SHALL BE CONSISTENT WITH THE TOWN OF ADDISON SPECIFICATIONS (VERIFY WITH TOWN OF ADDISON CONSTRUCTION REPRESENTATIVE).

**IRRIGATION LEGEND**

- ▲ TOROMAR DIE POP-UP SHRUB SPRAY HARDIE HSN-7 1/2" FULL NOZZLE ON A TORO #4P SI BODY (1.86 GPM)
- △ TORO POP-UP SHRUB SPRAY 570Z SERIES MP1 1/2" FULL HALF, & QUARTER NOZZLE ON A #12P SI BODY (2.19, 1.09, .5 GPM)
- △ TORO SHRUB SPRAY 570Z SERIES MP1 1/2" FULL HALF, & QUARTER NOZZLE ON A 1/2" COPPER RISER WITH 570 SHRUB ADAPTER (2.19, 1.09, .5 GPM)
- ⊕ WEATHERMATIC WITH FLOW CONTROL 6000 SERIES ELECTRIC REMOTE CONTROL VALVE
- SCHEDULE 40 PVC MAINLINE
- CLASS 200 PVC LATERAL LINE, EXCEPT 1/2 INCH DIAMETER SHALL BE CLASS 315. NOTE: ALL DIRECTLY BURIED LINE BENEATH PAVING SHALL BE SCHEDULE 40 PVC
- ⊕ GPM THROUGH VALVE
- ⊕ VALVE SEQUENCING NUMBER
- ⊕ SIZE OF VALVE
- ⊕ MANUAL GATE VALVE - LINE SIZE
- ⊕ ELECTRIC CONTROLLER MANUFACTURER AND MODEL AS SHOWN ON PLAN
- PVC SLEEVE (EXISTING - U.N.C.)
- ⊕ FREEZE SENSOR PENN A-15ANC
- ⊕ MOISTURE SENSOR (REUSE EXISTING)
- ⊕ 1/2" IRRIGATION WATER METER & TAPPING SLEEVE (EXISTING)
- ⊕ FERCO DOUBLE CHECK VALVE 1/2" 8005 Y IN FLUSH CONCRETE VALVE BOX (EXISTING)



Stephen C. Berkenbile  
&  
Associates  
Irrigation Design Consultants  
411 Hyde Park Place  
Duncanville, Texas 75117  
(214) 296-2724 Fax (214) 296-2724

*Stephen C. Berkenbile*

LINDA  
TYCHER  
& ASSOCIATES  
LANDSCAPE ARCHITECTS  
11411 N. CENTRAL EXPRESSWAY SUITE "V"  
DALLAS, TEXAS 75243  
PH: 214-750-1210 FAX: 214-381-8727

ISSUE DATE: 11-9-95

KELLER SPRINGS ROAD  
NORTH DALLAS TOLLWAY  
INTERSECTION IMPROVEMENTS  
IRRIGATION PLAN

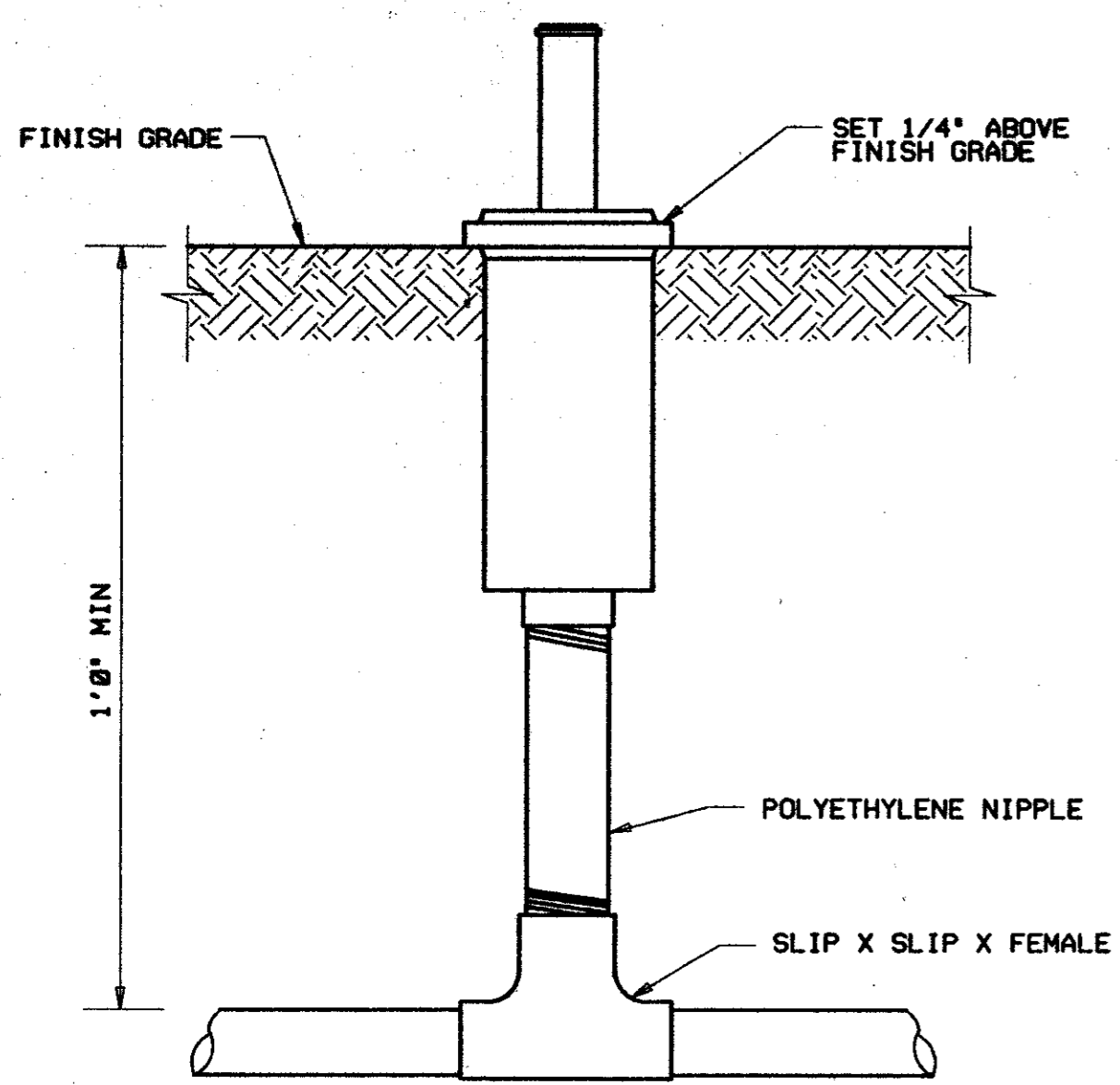
TOWN OF ADDISON, TEXAS

**RUJST LICHLITER/JAMESON**  
Environment & Infrastructure  
Consulting Engineers, Scientists and Planners  
1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247-4906

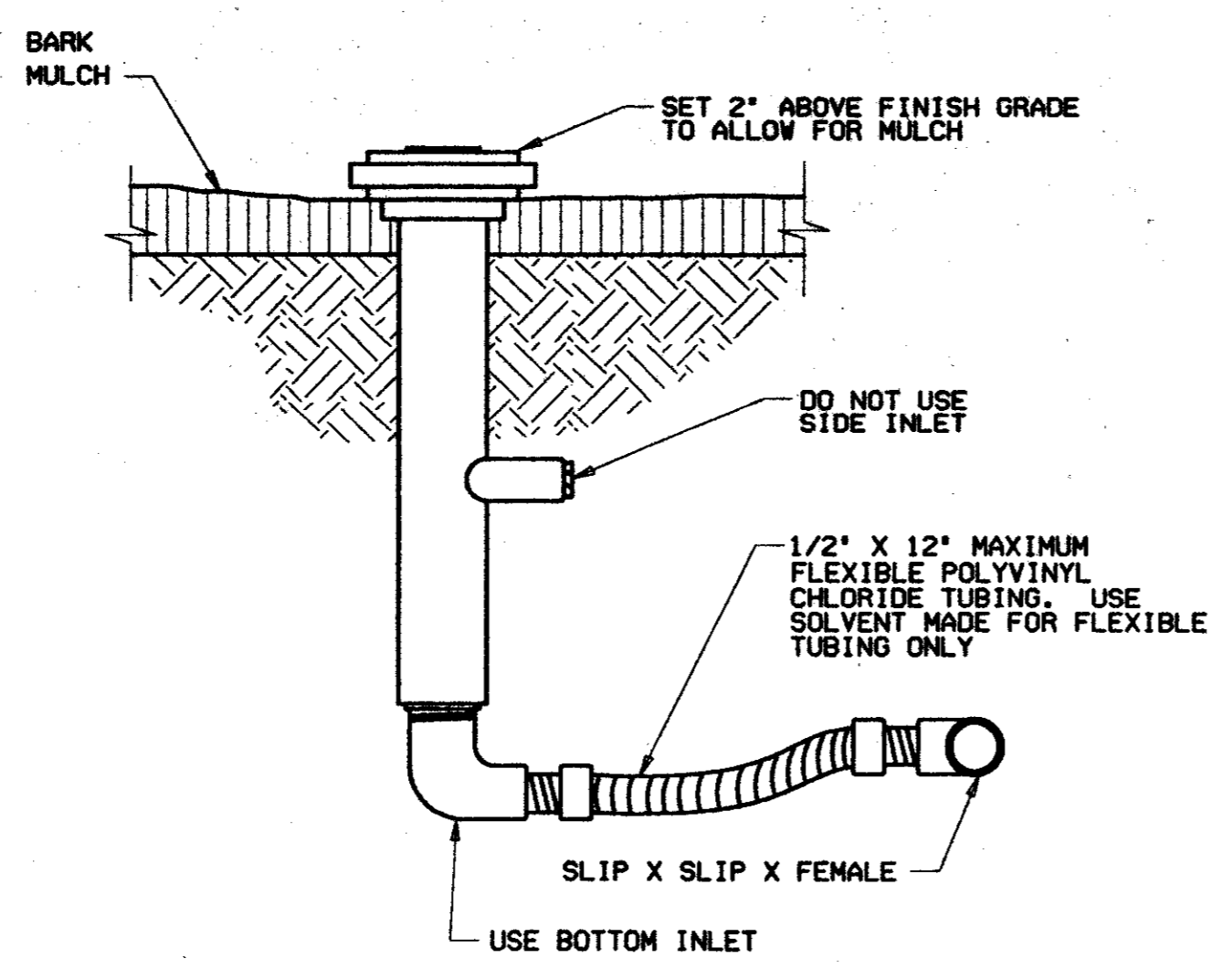
JOB NO. 67515-001	DATE	DRAWN BY	CHECKED BY
CAD FILE	CAD DATE	SCALE	SHEET

KELLER SPRINGS @ DALLAS PARKWAY IRRIGATION 11/95

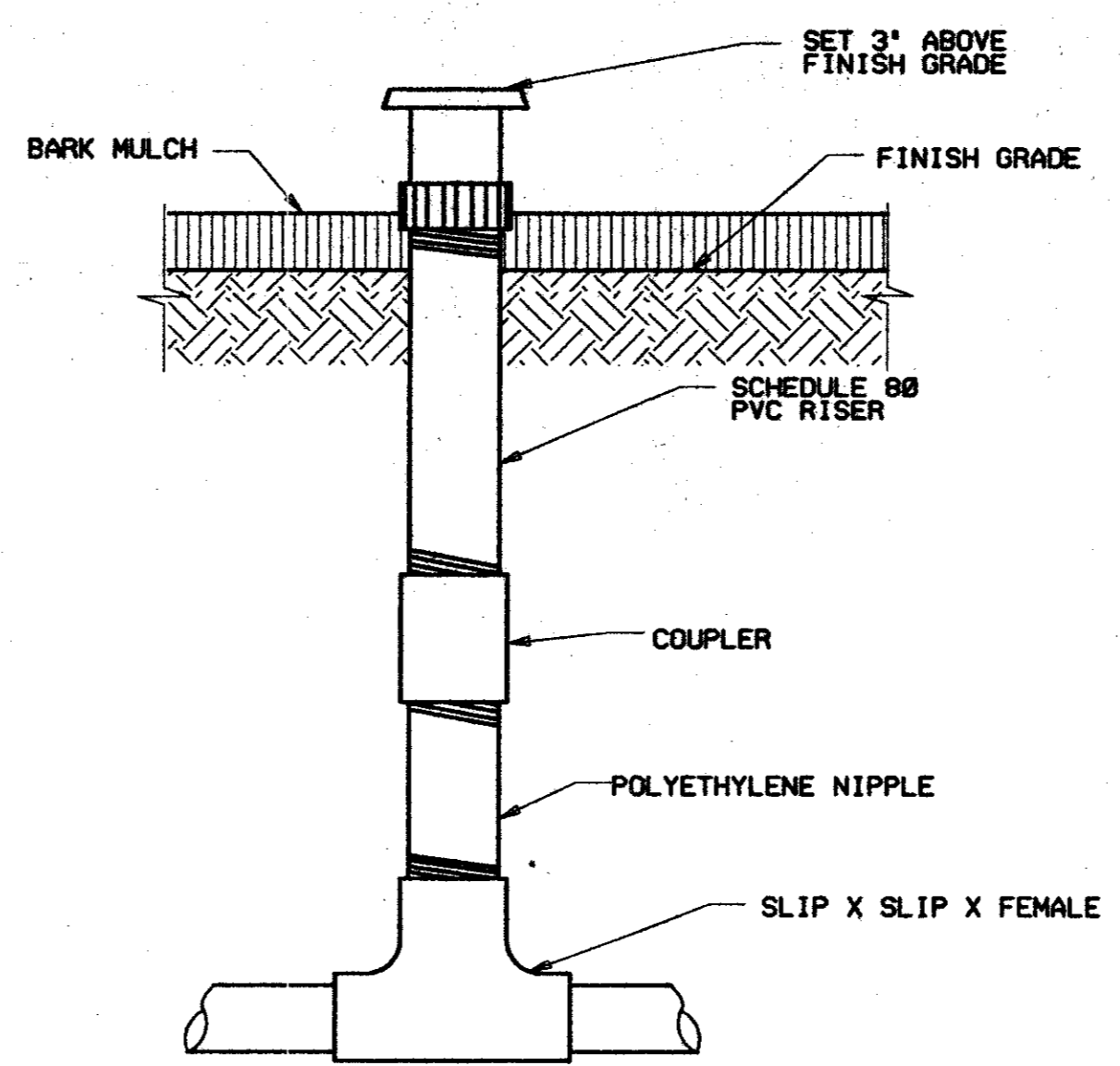




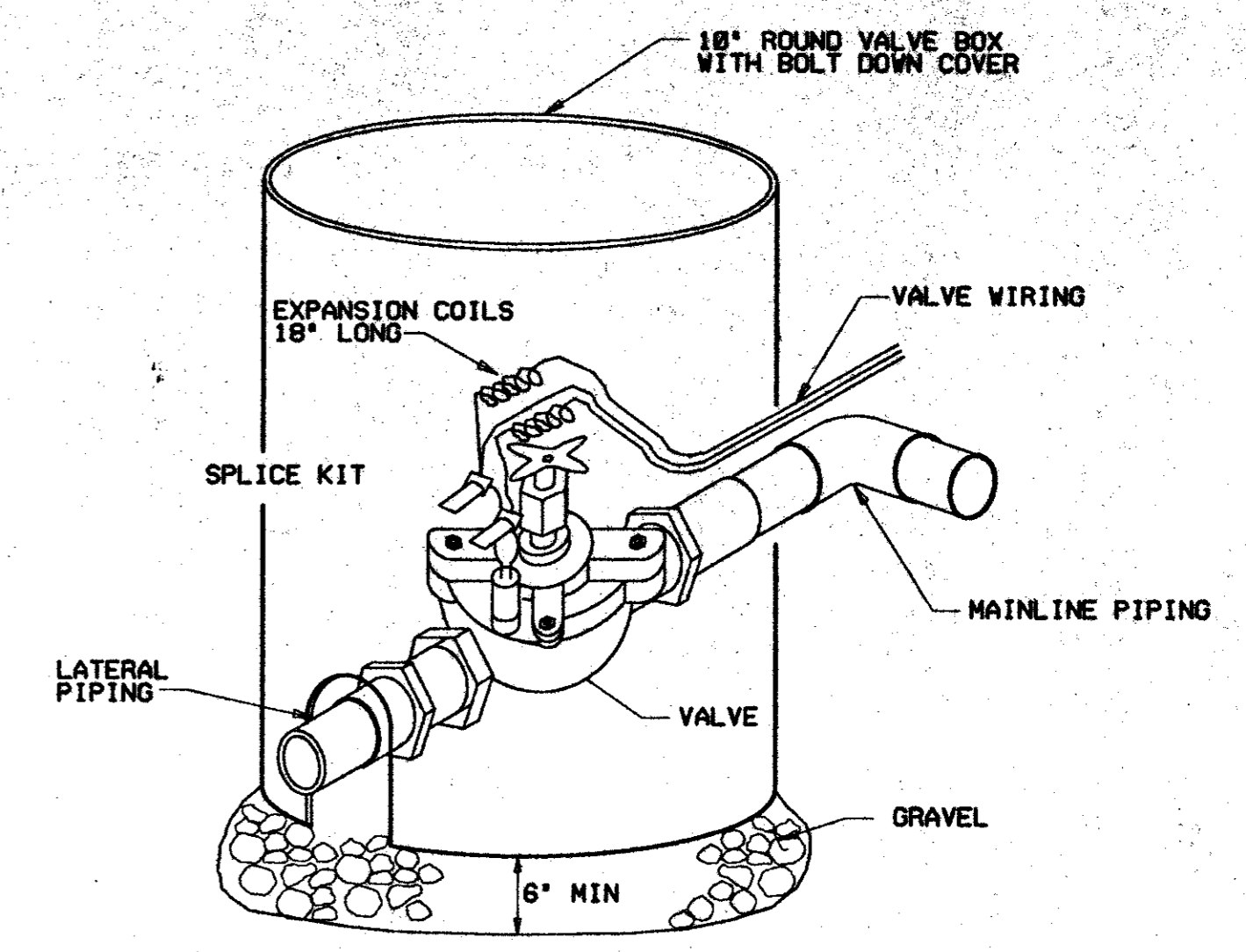
**3.5" HIGH POP LAWN HEAD DETAIL** (1)  
NTS



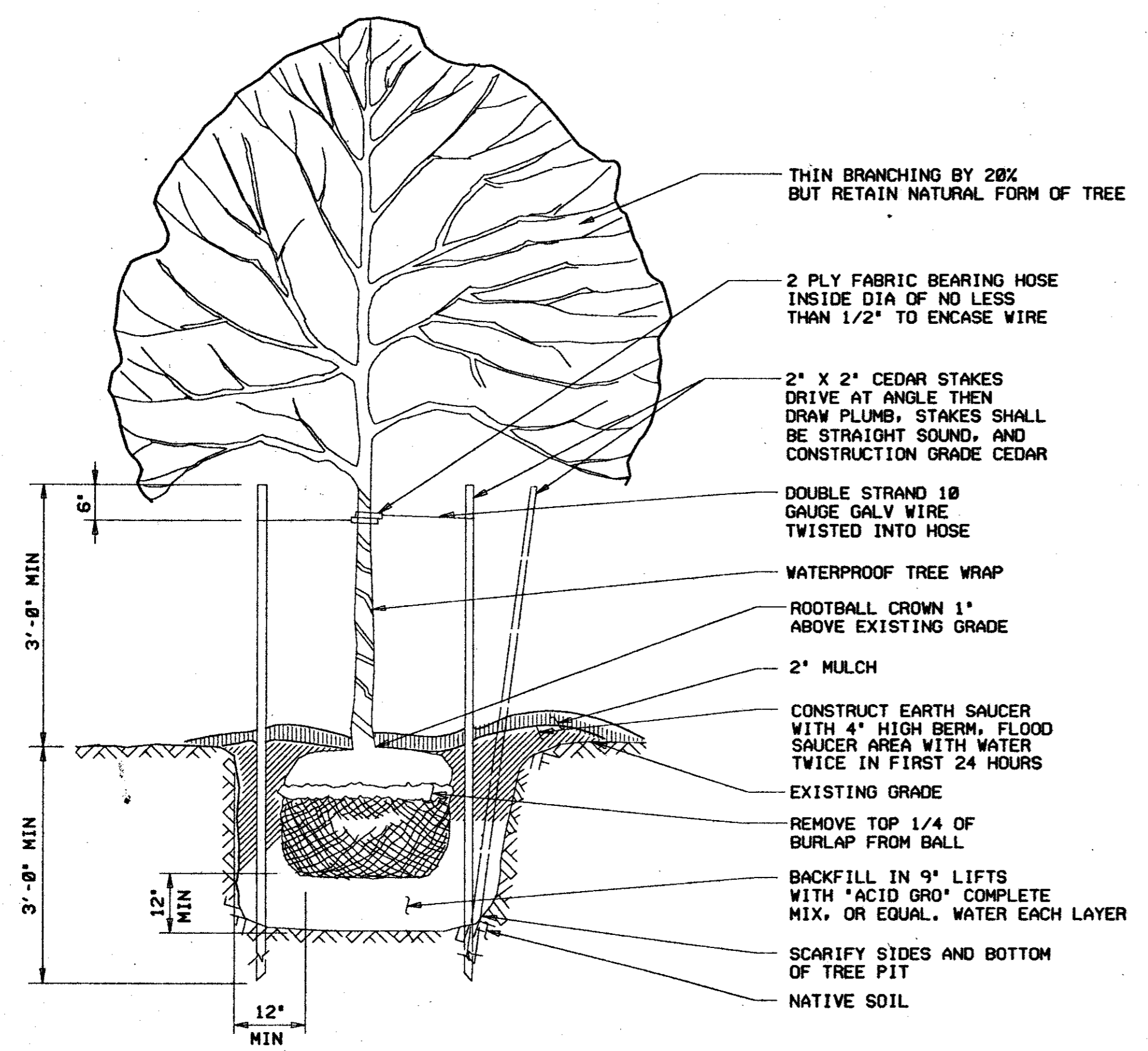
**12" HIGH POP SHRUB HEAD DETAIL** (2)  
NTS



**BUBBLER DETAIL** (3)  
NTS

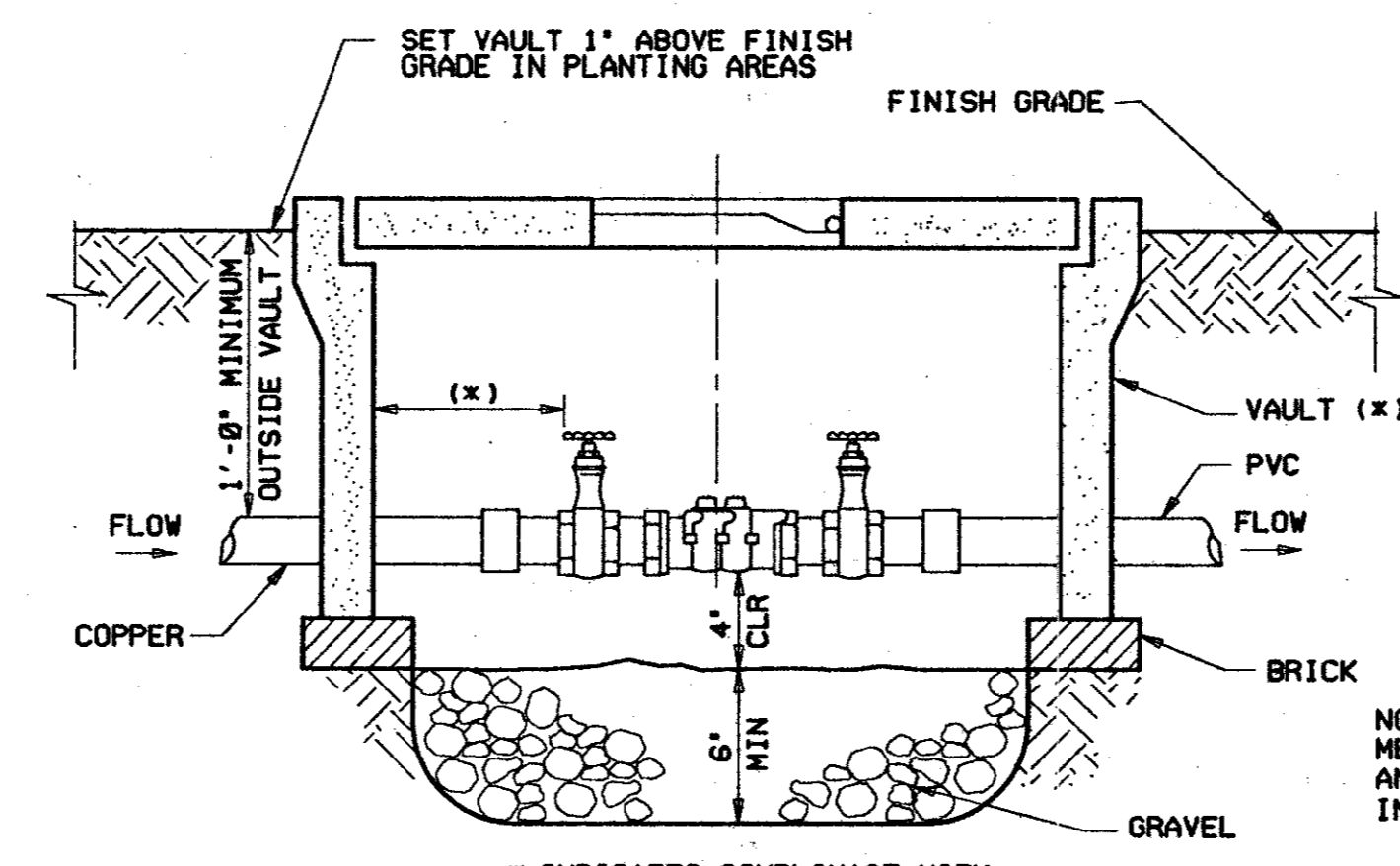


**SOLENOID REMOTE CONTROL VALVE DETAIL** (4)  
NTS



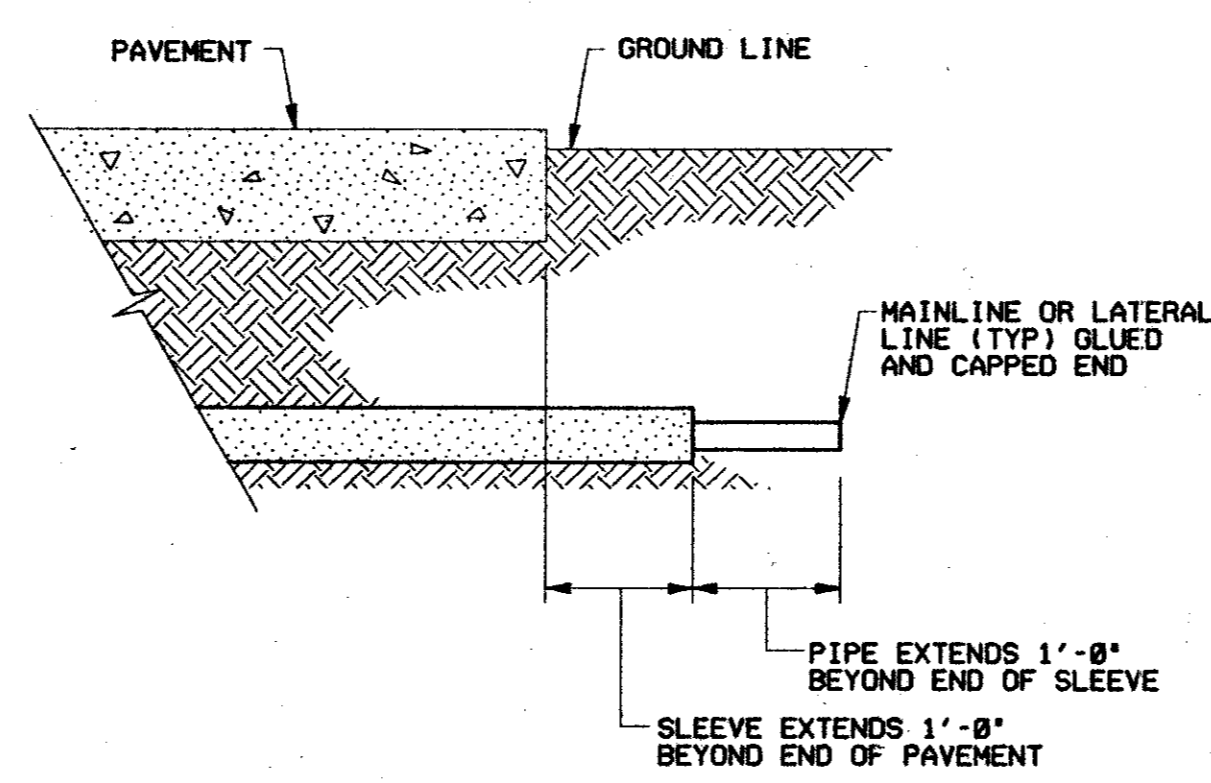
**TREE STAKING/PLANTING PROCEDURE DETAIL** (9)  
NTS

NOTE: THIS DETAIL FOR ALL ORNAMENTALS AND TREES 4" CALIPER AND LESS. PLANTING PROCEDURE UTILIZED FOR ALL TREES.

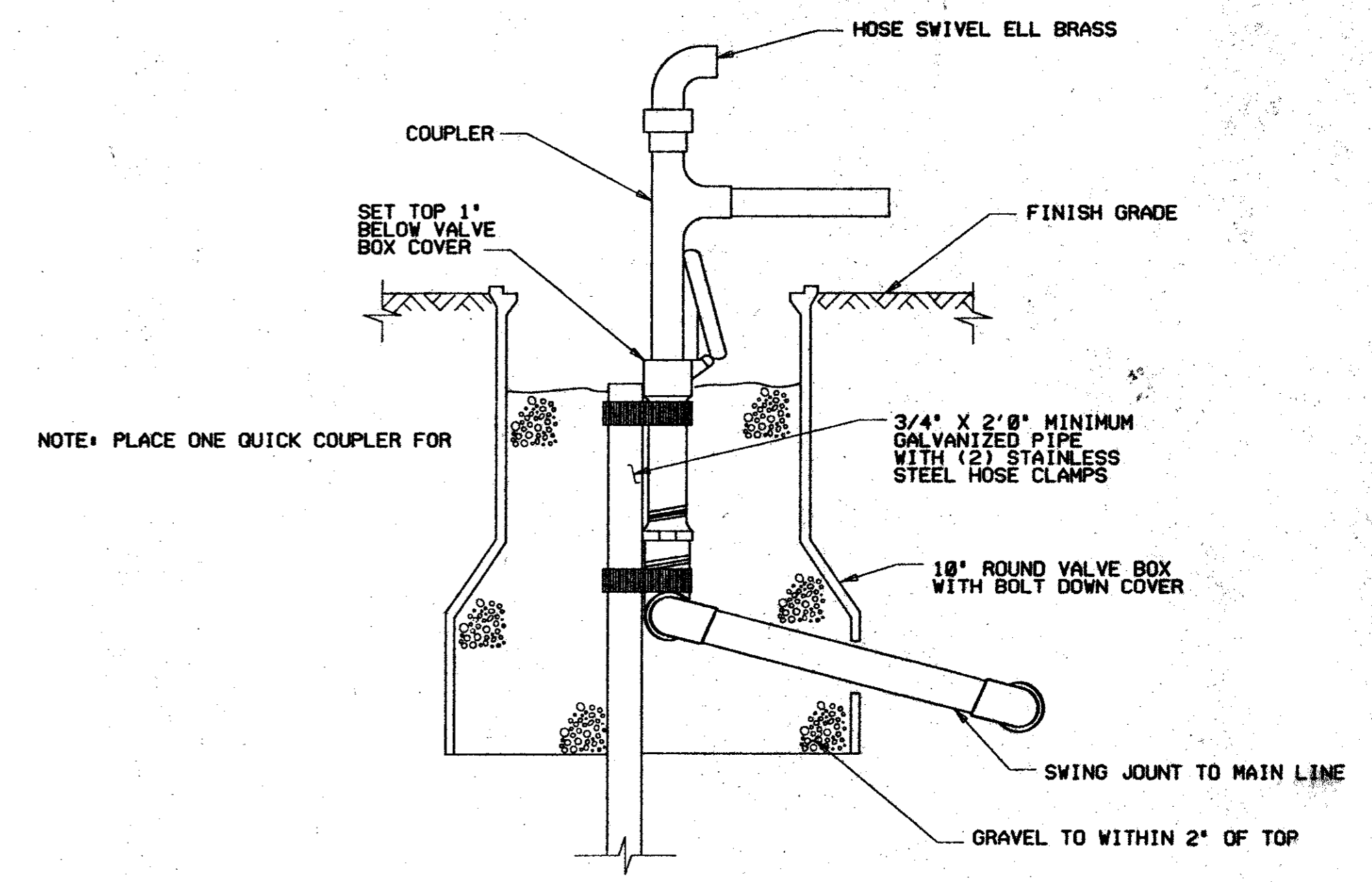


**DOUBLE CHECK VALVE ASSEMBLY DETAIL** (5)  
NTS

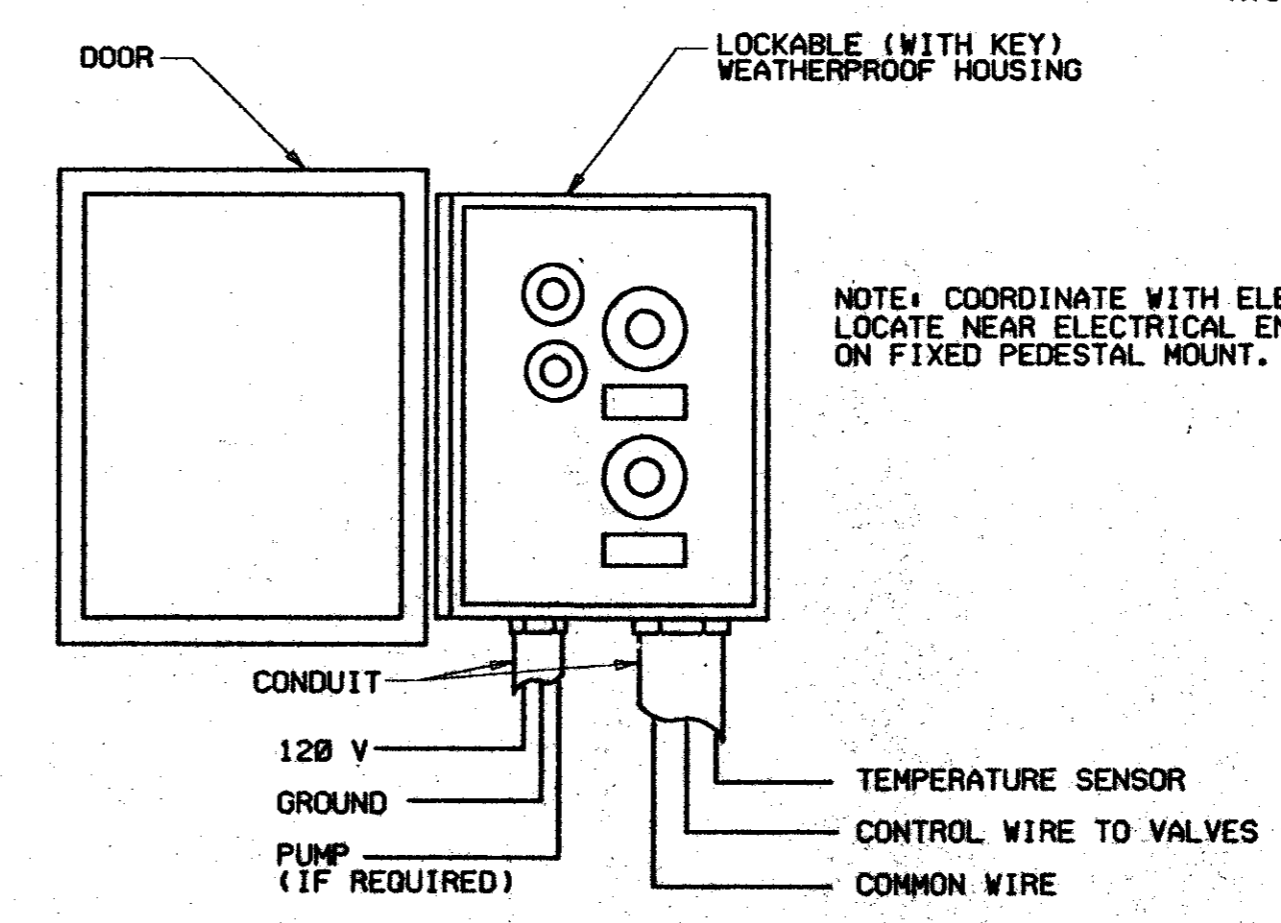
NOTE: COORDINATE IRRIGATION WATER METER INSTALLATION WITH CIVIL AND/OR M.E.P. TO DETERMINE LOCATION(S) IN RELATION TO SITE WATER METER(S).



**PIPE GLUED & CAPPED** (7)  
NO SCALE



**QUICK COUPLER VALVE DETAIL** (6)  
NTS



**IRRIGATION CONTROLLER DETAIL** (8)  
NTS

**LINDA TYCHER & ASSOCIATES**  
LANDSCAPE ARCHITECTS  
11441 N. CENTRAL EXPRESSWAY SUITE 'V'  
DALLAS, TEXAS 75248  
PH: 214-750-1210 FAX: 214-381-8727

ISSUE DATE 10/9/95			
KELLER SPRINGS ROAD NORTH DALLAS TOLLWAY INTERSECTION IMPROVEMENTS DETAIL SHEET			
TOWN OF ADDISON, TEXAS			
<b>RUST LICHTER/JAMES</b>			
Environment & Infrastructure Consulting Engineers, Scientists and Planners 1420 W. Mockingbird Lane, Suite 300, Dallas, Texas 75247-9906			
JOB NO. 67515-001	DATE 8-29-95	DRAWN BY JB	CHECKED BY
CAD FILE	CAD DATE	SCALE	SHEET 3 OF 11