

SITework PLANS FOR

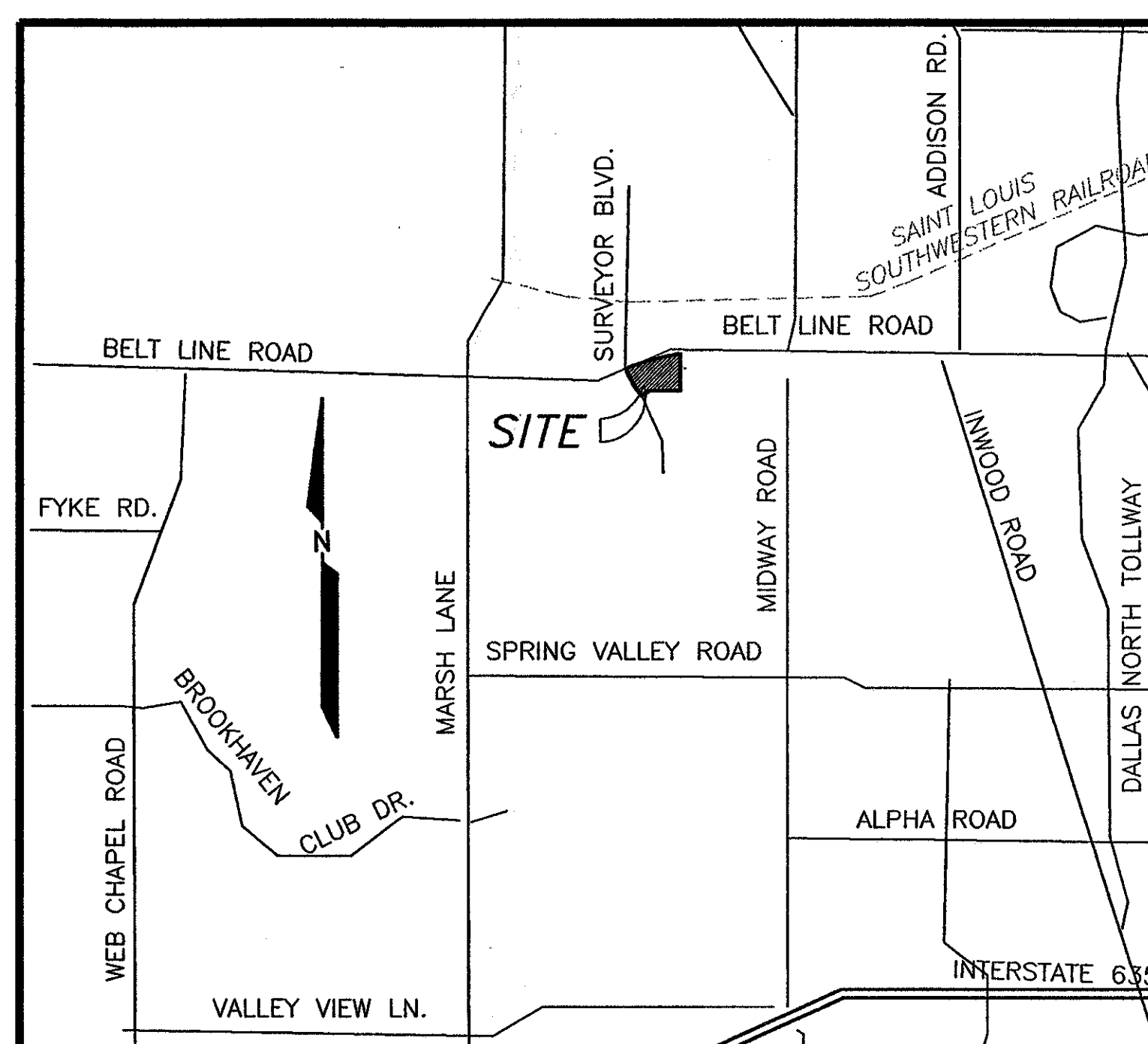
SOUTHTRUST BANK

S.E.C. OF BELTLINE ROAD & SURVEYOR ROAD ADDISON, TEXAS

OWNER:
SOUTHTRUST BANK
 5430 LBJ FREEWAY, STE. 1260
 DALLAS, TEXAS 75240
 CONTACT: STEVE FREEMAN
 (972) 246-1515
 FAX: (972) 490-1667

PROJECT ARCHITECT:
TGS ARCHITECTURE
 5323 SPRING VALLEY ROAD, SUITE 200
 DALLAS, TEXAS 75254
 CONTACT: STEVE CAMPBELL
 (972) 788-1945
 FAX: (972) 788-2309

CIVIL ENGINEER:
LAWRENCE A. CATES & ASSOCIATES, LLP
 14200 MIDWAY ROAD, SUITE 122
 DALLAS, TEXAS 75244
 CONTACT: BRYAN M. BURGER, P.E.
 (972) 385-2272
 FAX: (972) 980-1627



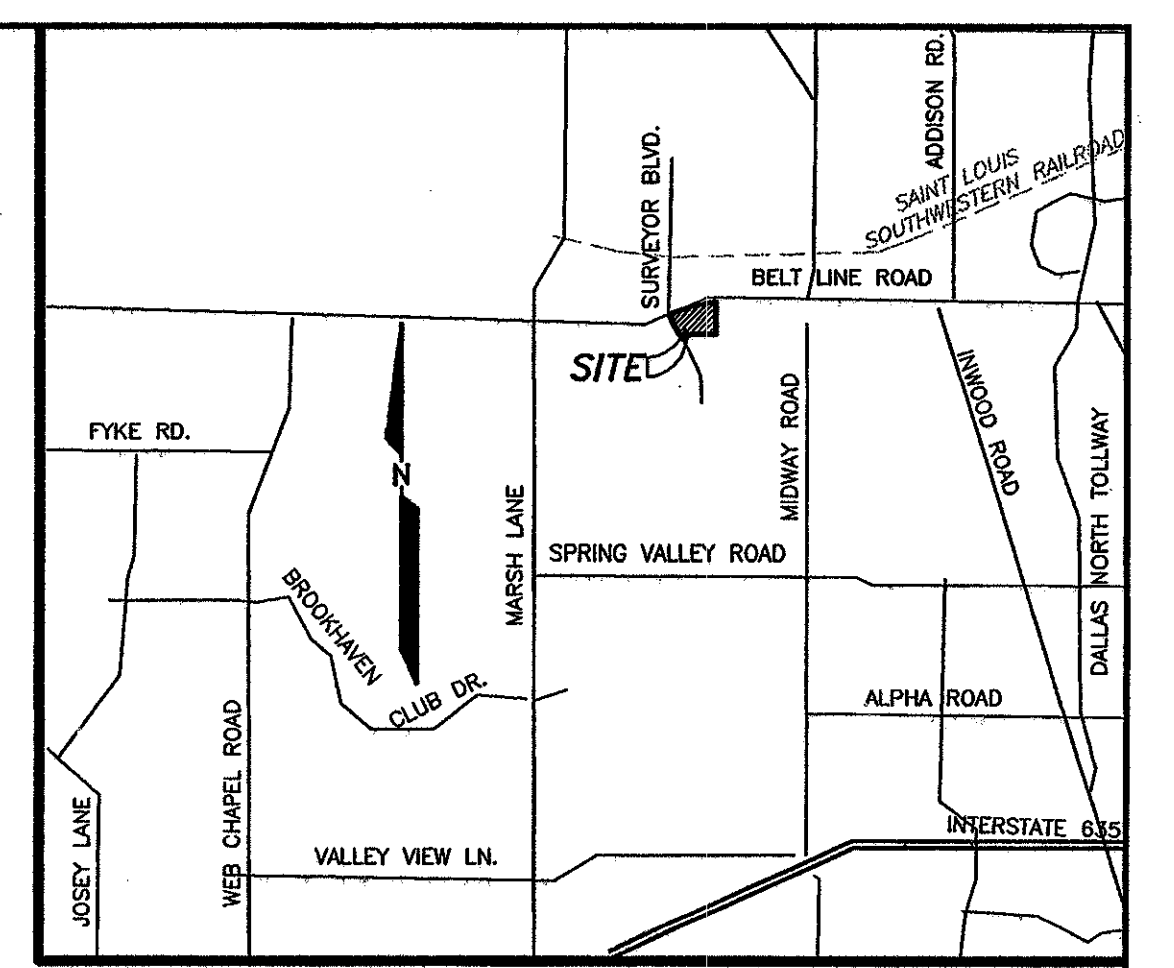
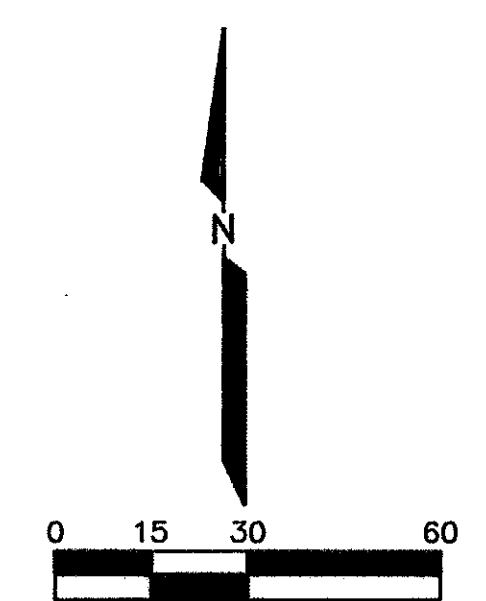
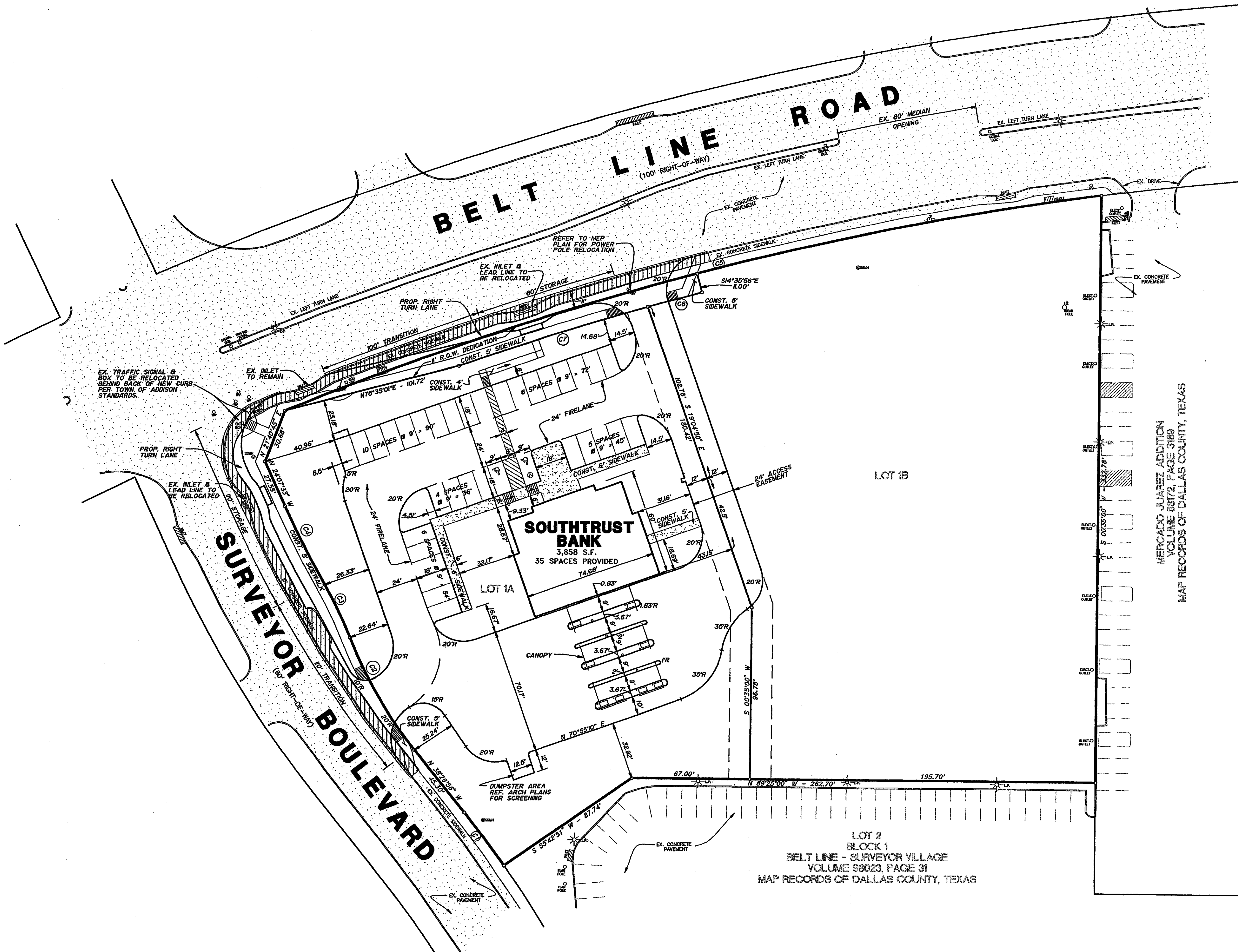
VICINITY MAP
 N.T.S.

SHEET INDEX

C-1A & B	PLAT
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4020 BELT LINE
 SOUTHTRUST/WACHOVIA

24001 SOUTHTRUST BANK, ADDISON, TEXAS



VICINITY MAP
NTS

SITE DATA	
SITE AREA:	1.2898 Ac. (56,185 S.F.)
PROPOSED USE:	DRIVE THRU BANK
BUILDING AREA:	3,858 S.F.
PARKING REQUIRED:	13
PARKING PROVIDED:	35
BUILDING HEIGHT:	1 STORY

NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC BOUNDARY SURVEY, INCLUDING PROPERTY LINE, LEGAL DESCRIPTION, EXISTING UTILITIES, SITE TOPOGRAPHY WITH SPOT ELEVATIONS, OUTSTANDING PHYSICAL FEATURES AND EXISTING STRUCTURE LOCATIONS WAS PROVIDED BY:

DAVID PETREE
11015 MIDWAY ROAD
DALLAS, TEXAS 75229
(214) 358-4500
3. REFER TO ARCHITECTURAL PLANS FOR DETAILED BUILDING DIMENSIONS.
4. BUILDING IS PARALLEL AND PERPENDICULAR TO THE EAST PROPERTY LINE.
5. ALL RADII ARE 2' UNLESS OTHERWISE NOTED.

LEGEND

- ⊙ F.H. FIRE HYDRANT
- ⊗ CHISELED "X" SET
- ⊗ CHISELED "X" FOUND
- ⊗ IRON ROD FOUND (SIZE AS NOTED)
- ⊗ IRON ROD SET (SIZE AS NOTED)
- ⊗ OVERHEAD UTILITY POLE W/ GUY
- ⊗ UNDERGROUND ELECTRIC OR TELEPHONE
- ⊗ L.P. LIGHT POLE
- ⊗ S.S.M.H. SANITARY SEWER MANHOLE
- ⊗ S.W.R. CLEAN OUT
- ⊗ G.V. GAS VALVE
- ⊗ W.V. WATER VALVE
- ⊗ TREE
- ⊗ PROP. LIGHT POLE
- ⊗ PROP. PYLON SIGN
- ▨ FULL DEPTH SAWCUT & REMOVE EX. P.V.M.T
- ⊗ VAN ACCESSIBLE PARKING SPACE
- ⊗ PROPOSED STOP SIGN
- ♿ ACCESSIBLE SPACE

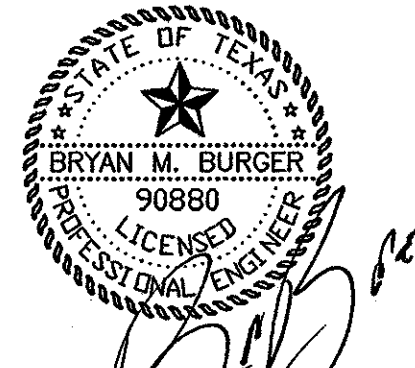
~ CURVE DATA TABLE ~

NO.	RADIUS	DELTA	ARC	CH. BEARING	CHORD
C1	630.00'	03°24'49"	37.54'	N 36°44'31" W	37.53'
C2	250.00'	16°48'15"	73.32'	N 30°02'48" W	73.06'
C3	250.00'	07°37'42"	33.28'	N 25°27'32" W	33.26'
C4	559.00'	05°08'57"	50.24'	N 26°41'54" W	50.22'
C5	1860.00'	14°46'42"	479.75'	N 75°12'17" E	478.42'
C6	1849.00'	00°59'17"	31.88'	S 74°54'25" W	31.88'
C7	1849.00'	03°28'22"	112.07'	S 72°40'36" W	112.05'

MERCADO JUAREZ ADDITION
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MAP RECORDS OF DALLAS COUNTY, TEXAS

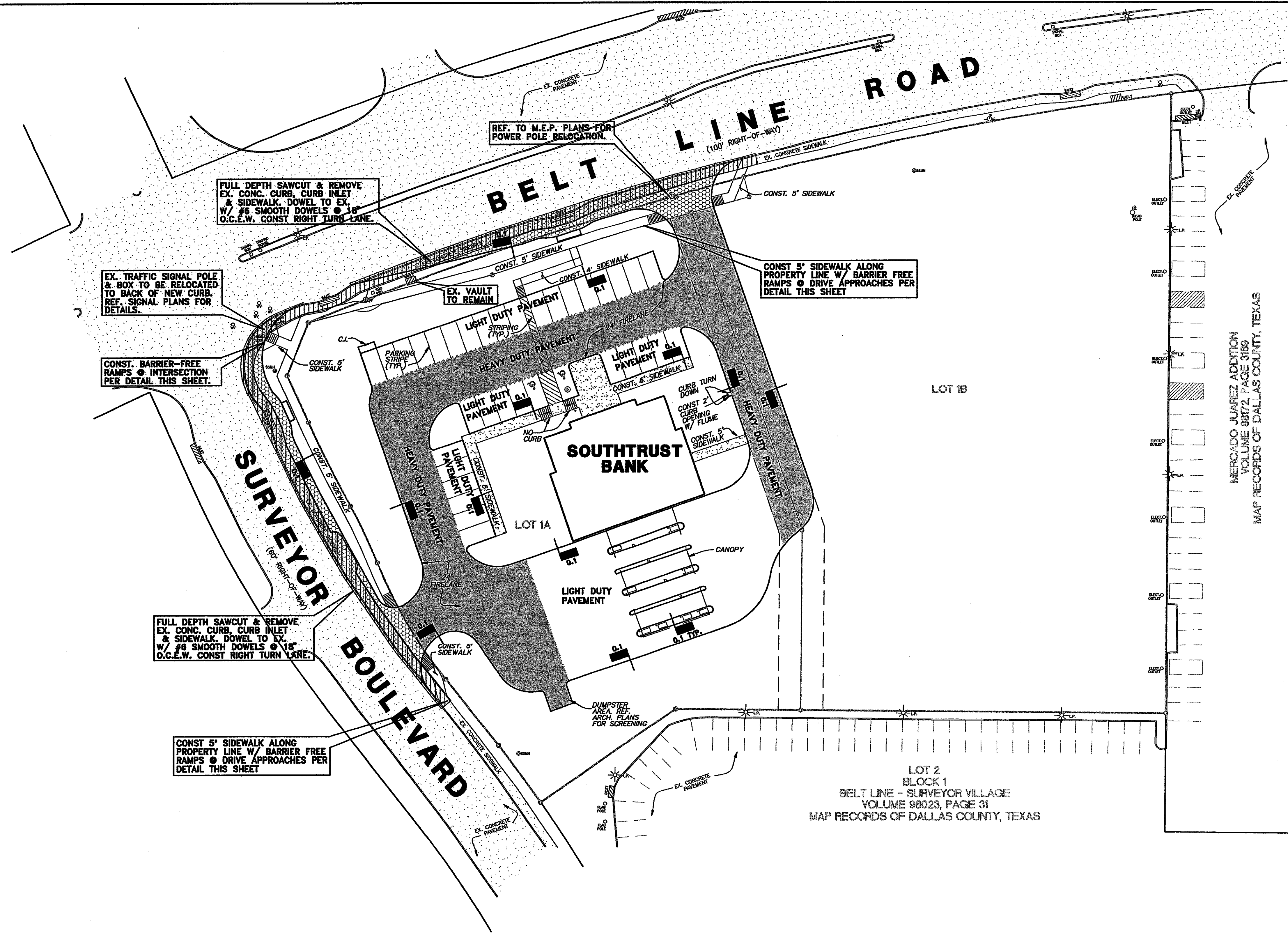
LOT 2
BLOCK 1
BELT LINE - SURVEYOR VILLAGE
VOLUME 98023, PAGE 31
MAP RECORDS OF DALLAS COUNTY, TEXAS

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY
BRYAN M. BURGER, P.E. 90880
ON 5/27/04



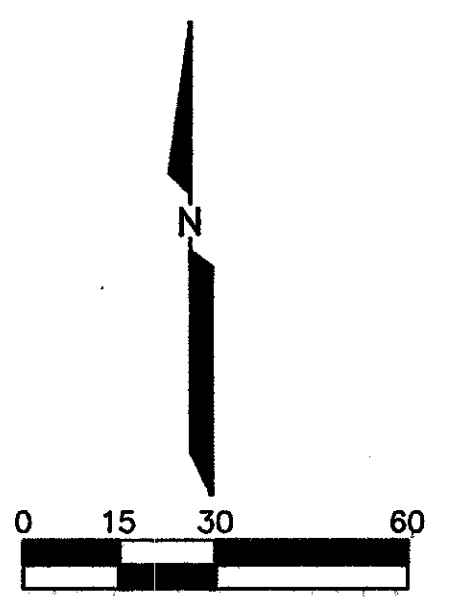
REV	DATE	REMARKS

SITE PLAN						
SOUTHTRUST BANK						
BELT LINE - SURVEYOR VILLAGE ADDITION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 (972) 385-2272				CONSULTING ENGINEERS DALLAS, TEXAS		
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BMB	JVW	FEB-04	1"=30'	D.P.	24001 SITE	C-2

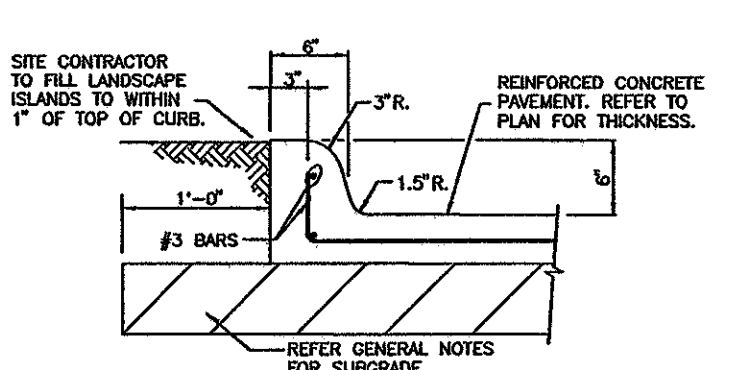


PAVING GENERAL NOTES:

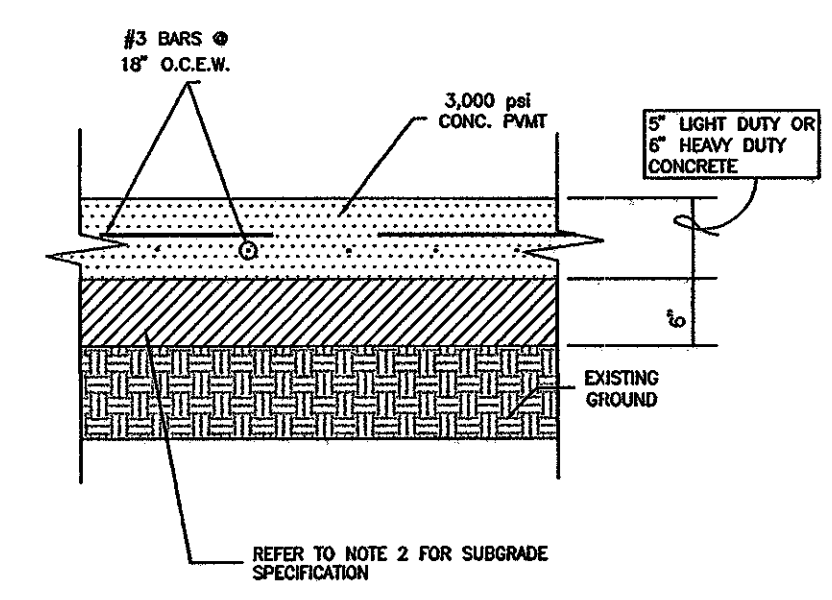
1. ALL ON SITE CONCRETE PAVING SHALL BE OF THE THICKNESS SHOWN ON THE PLAN AT 28 DAYS AND HAVING A ONE INCH (1") TO FOUR INCH (4") SLUMP AND REINFORCED WITH #3 BARS @ 18" O.C.E.W. REINFORCING SHALL BE SUPPORTED BY CHAIRS AND SPACED AT 16 S.F. MAXIMUM INTERVAL.
2. SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6" AND UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT (95%) STANDARD PROCTOR AT OR ABOVE OPTIMUM MOISTURE. REFER TO REPORT BY REED ENGINEERING GROUP DATED FEBRUARY 2004, PROJECT NUMBER 10924.
3. SEALANT MATERIAL TO BE 0M44 ASPHALT OR A RUBBER BASED COMPOUND, U.N.O. SPECIFICATIONS TO BE SUBMITTED TO THE ENGINEER PRIOR TO INSTALLATION.
4. BREAKOUTS FOR REMOVAL OF EXISTING PAVEMENT AND CURBS SHALL BE MADE BY FULL DEPTH SAW CUT WHEN ADJACENT TO PROPOSED PAVING AND/OR CURBS.
5. PROPOSED CONCRETE CURBS SHALL MATCH ELEVATIONS OF EXISTING CURB.
6. CONCRETE TO BE BROOM FINISHED AND CURED FOR A MINIMUM OF 72 HOURS.
7. ALL PARKING SPACES SHOWN ON PROPOSED CONSTRUCTION SHALL BE MARKED WITH 4 INCH (4") WIDE YELLOW PAINTED PAVEMENT STRIPING. PAINT SHALL BE SHERWIN WILLIAMS SERIES OR APPROVED ALTERNATE.
8. ALL WORKMANSHIP AND MATERIAL SHALL BE IN ACCORDANCE WITH TOWN OF ADDISON STANDARD SPECIFICATIONS AND/OR SPECIFICATIONS ESTABLISHED BY THIS PROJECT. THE MOST STRINGENT SHALL APPLY.
9. CONTRACTOR SHALL SUBMIT A JOINT SPACING PLAN TO THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE PAVEMENT. CONTROL JOINTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF 12' O.C.E.W. EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF NINETY FEET (90') CONCRETE SHALL BE PLACED IN STRIPS NOT TO EXCEED 30 FEET (30') IN WIDTH OR PUMPED. LEVEL UP SAND COURSE WILL NOT BE ALLOWED.
10. CONTRACTOR WILL PROVIDE A TWO (2) YEAR UNCONDITIONAL MAINTENANCE FREE WARRANTY ON PORTLAND CEMENT CONCRETE PAVEMENT.
11. ALL ACCESSIBLE RAMPS TO BE CONSTRUCTED PER ADA STANDARDS.
12. ALL FIRE LANES SHALL BE STRIPED IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.



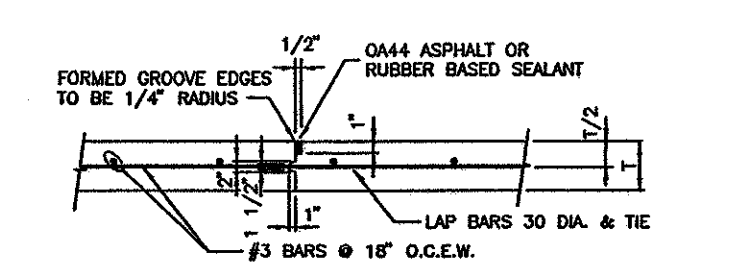
MERCADO, ILLA REZ ADDITION
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MAP RECORDS OF DALLAS COUNTY, TEXAS



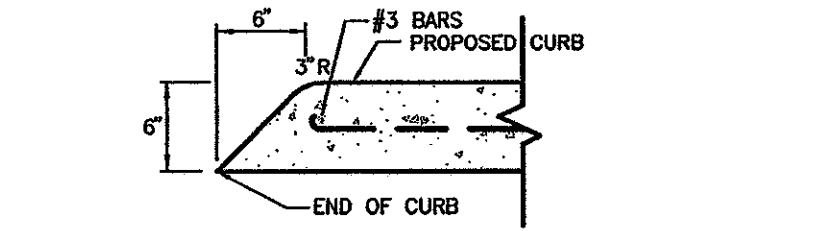
0.1 INTEGRAL CURB DETAIL
N.T.S.



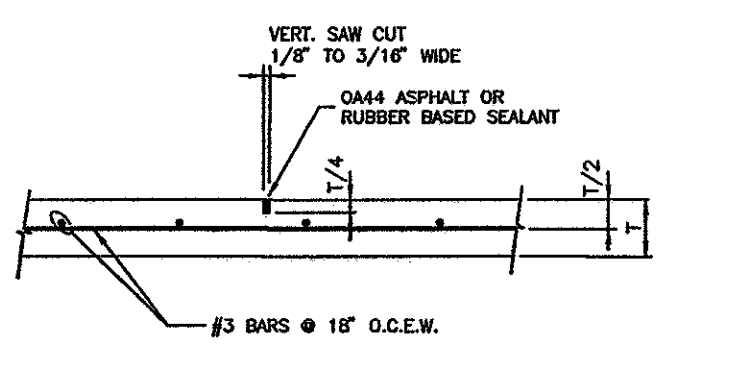
ON SITE LIGHT/HEAVY DUTY CONCRETE PAVEMENT SECTION
N.T.S.



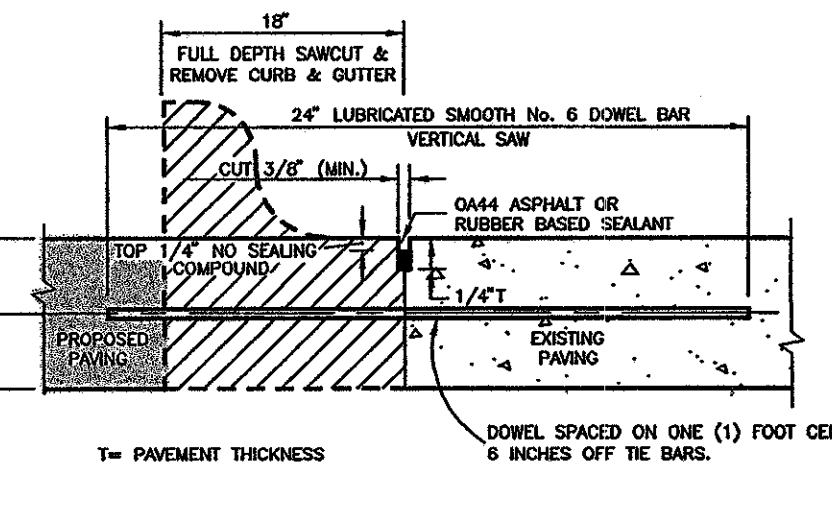
0.2 CONSTRUCTION JOINT
N.T.S.



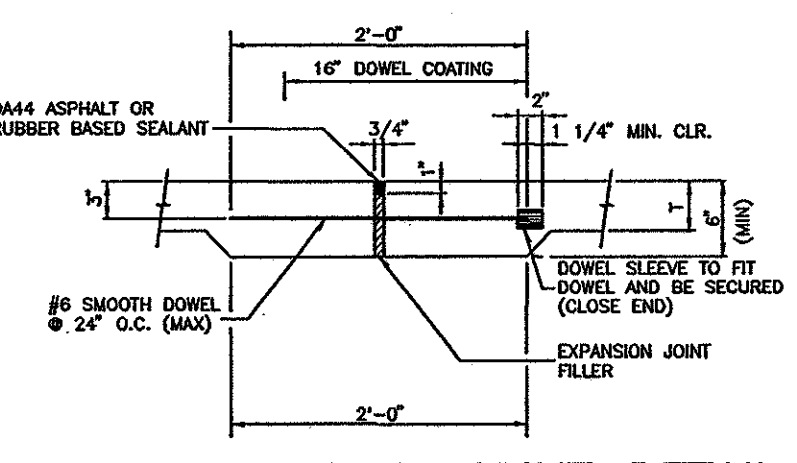
CURB TURN DOWN DETAIL
N.T.S.



0.3 CONTROL JOINT
N.T.S.



0.5 LONGITUDINAL BUTT JOINT
N.T.S.



0.4 EXPANSION JOINT DETAIL
N.T.S.

FULL DEPTH SAWCUT & REMOVE EX. CONC. CURB, CURB INLET & SIDEWALK. DOWEL TO EX. W/ #6 SMOOTH DOWELS @ 18" O.C.E.W. CONST. RIGHT TURN LANE.

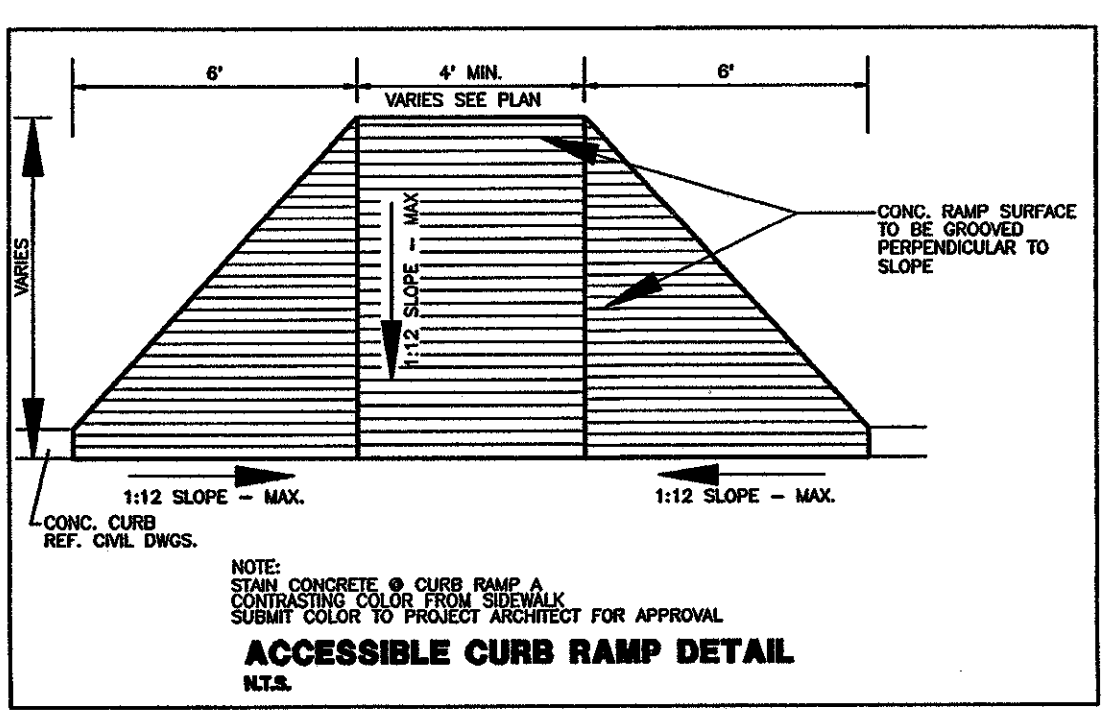
EX. TRAFFIC SIGNAL POLE & BOX TO BE RELOCATED TO BACK OF NEW CURB. REF. SIGNAL PLANS FOR DETAILS.

CONST. BARRIER-FREE RAMPS @ INTERSECTION PER DETAIL THIS SHEET.

FULL DEPTH SAWCUT & REMOVE EX. CONC. CURB, CURB INLET & SIDEWALK. DOWEL TO EX. W/ #6 SMOOTH DOWELS @ 18" O.C.E.W. CONST. RIGHT TURN LANE.

CONST. 5' SIDEWALK ALONG PROPERTY LINE W/ BARRIER FREE RAMPS @ DRIVE APPROACHES PER DETAIL THIS SHEET

CONST. 5' SIDEWALK ALONG PROPERTY LINE W/ BARRIER FREE RAMPS @ DRIVE APPROACHES PER DETAIL THIS SHEET



ACCESSIBLE CURB RAMP DETAIL
N.T.S.

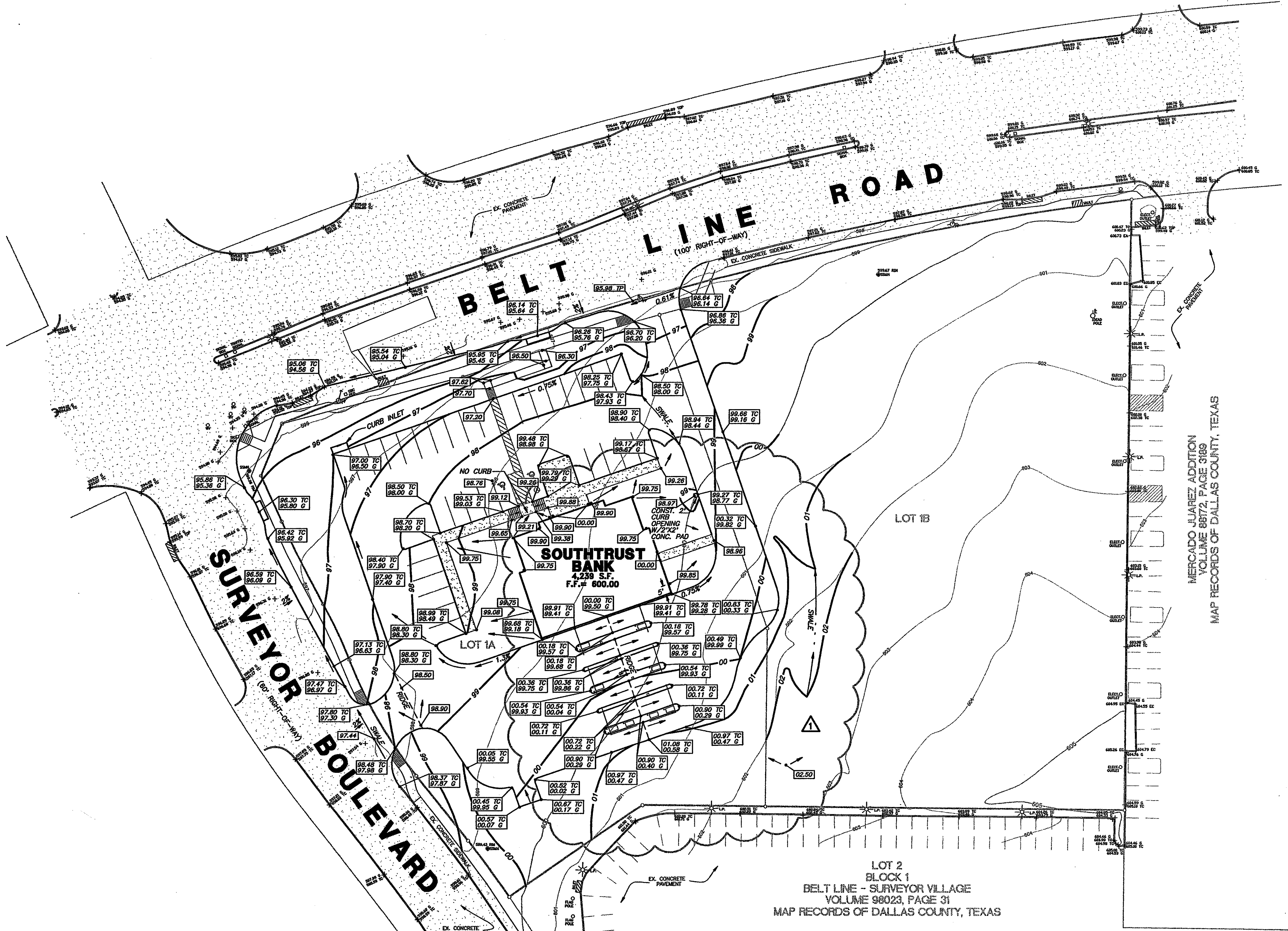
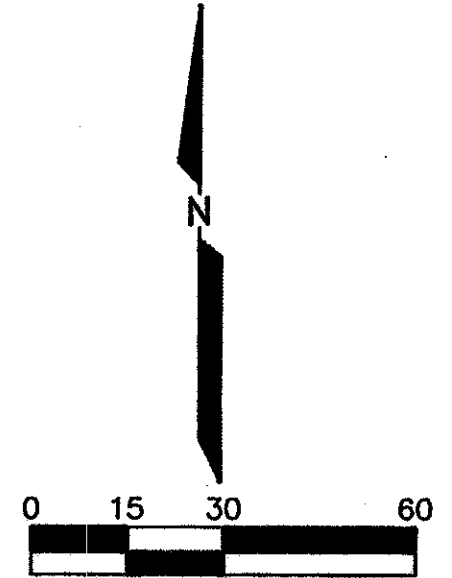
- LEGEND**
- 5" - 3,000 P.S.I. REINFORCED CONCRETE LIGHT DUTY PAVT.
 - 6" - 3,000 P.S.I. REINFORCED CONCRETE HEAVY DUTY PAVT.
 - 8" - 3,600 P.S.I. REINFORCED CONCRETE W/ #4 BARS @ 18" O.C.E.W.
 - FULL DEPTH SAW CUT REMOVE EXIST. CURB

- LEGEND**
- F.H. FIRE HYDRANT
 - CHISELED "X" SET
 - O.F.A. CHISELED "X" FOUND
 - O.F.R. IRON ROD FOUND (SIZE AS NOTED)
 - O.S.R. IRON ROD SET (SIZE AS NOTED)
 - PP OVERHEAD UTILITY POLE W/ GUY
 - U.E. UNDERGROUND ELECTRIC OR TELEPHONE
 - L.P. LIGHT POLE (EX)
 - S.M.H. SANITARY SEWER MANHOLE (EX)
 - S.W.R. SAN. SWR. CLEAN OUT (EX)
 - G.V. GAS VALVE (EX)
 - W.V. WATER VALVE (EX)
 - TREE
 - PROP. COMBINATION GRATE INLET
 - PROP. DROP INLET
 - PROP. CURB INLET
 - PROP. SIGNAGE (H.C.)
 - PAINTED HANDICAP SYMBOL
 - PAINTED STRIPING @ ACCESS ROUTES
 - FIRE LANE

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 5/12/09



REV.	DATE	REMARKS				
PAVING PLAN						
SOUTHTRUST BANK						
BELT LINE - SURVEYOR VILLAGE ADDITION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. GATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 DALLAS, TEXAS		CONSULTING ENGINEERS DALLAS, TEXAS				
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BMB	CAC	FEB-04	1"=30'	D.P.	24001 PAV	C-3



GRADING GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND CITY STANDARDS AND SPECIFICATIONS.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MAKE CERTAIN THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED, NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED & THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER OF ANY CONFLICTS AND WAIT FOR DIRECTIONS BEFORE PROCEEDING OR CONTINUING WORK.
4. THE CONTRACTOR SHALL NOT IN ANY WAY DAMAGE EXISTING PAVEMENT, UTILITIES, DRAINAGE OR ANY OTHER FACILITIES IN THE COURSE OF HIS WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO PRIVATE PROPERTY.
5. THE CONTRACTOR SHALL VERIFY THE STABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES. MINOR ADJUSTMENT TO FINISH GRADE TO ACCOMPLISH SPOT DRAINAGE IS ACCEPTABLE, IF NECESSARY, UPON PRIOR APPROVAL OF THE ENGINEER. PAVING INSTALLED SHALL "FLUSH OUT" AT ANY JUNCTURE WITH EXISTING PAVEMENT.
6. ALL PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNATED GRADIENT ARE TO BE USED IN THE EVENT OF ANY DISCREPANCIES.
7. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING GRADING OPERATIONS.
8. SITE PREPARATION, GRADING AND FILL COMPACTION SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL EXPLORATION PREPARED FOR THIS PROJECT.

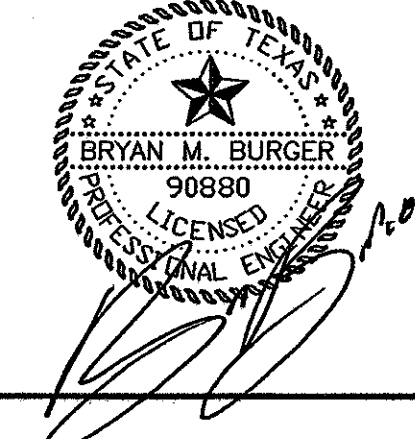
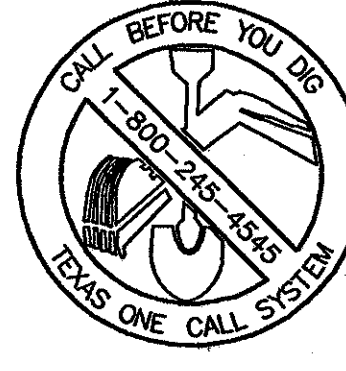
LEGEND

- ⊙ F.A. FIRE HYDRANT
 - ⊙ X SET CHISELED "X" SET
 - ⊙ F.A. CHISELED "X" FOUND
 - ⊙ R.F. IRON ROD FOUND (SIZE AS NOTED)
 - ⊙ R.F. IRON ROD SET (SIZE AS NOTED)
 - ⊙ O.P. OVERHEAD UTILITY POLE W/ CUY
 - ⊙ U.E. UNDERGROUND ELECTRIC OR TELEPHONE
 - ⊙ L.P. LIGHT POLE
 - ⊙ S.S.M. SANITARY SEWER MANHOLE
 - ⊙ S.S.W. SAN. SWR. CLEAN OUT
 - ⊙ G.V. GAS VALVE
 - ⊙ W.V. WATER VALVE
 - ⊙ T. TREE
- PROPOSED CONTOUR
 - - - - - EXISTING CONTOUR
 [000 TP] PROP. TOP OF PAVEMENT ELEVATION
 [00.00 TC] PROP. TOP OF CURB ELEVATION
 [00.00 G] PROP. GUTTER ELEVATION

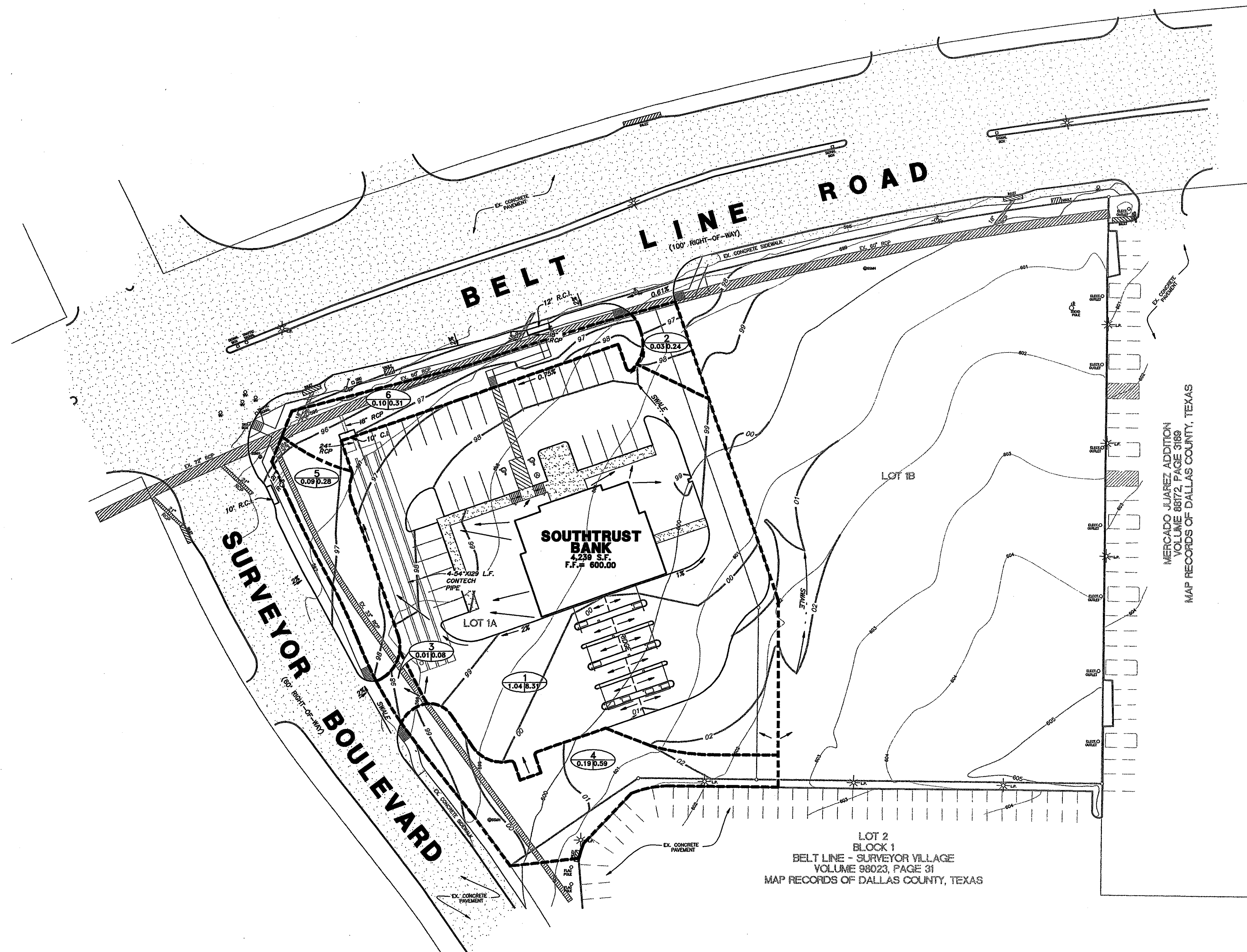
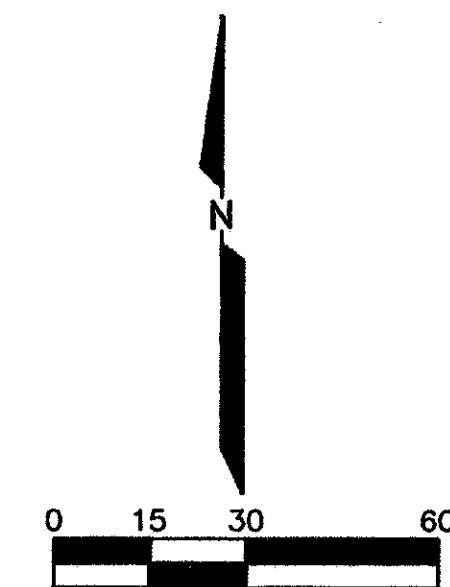
MERCADO JUAREZ ADDITION
VOLUME 8872, PAGE 3189
MAP RECORDS OF DALLAS COUNTY, TEXAS

LOT 2
BLOCK 1
BELT LINE - SURVEYOR VILLAGE
VOLUME 98023, PAGE 31
MAP RECORDS OF DALLAS COUNTY, TEXAS

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 6/23/04



REV.	DATE	REVISIONS
1	6-22-04	REVISED GRADING AT DRIVE THRU
2		REVISIONS
GRADING PLAN		
SOUTHTRUST BANK		
BELT LINE - SURVEYOR VILLAGE ADDITION		
TOWN OF ADDISON, TEXAS		
LAWRENCE A. CATES & ASSOC., LLP		CONSULTING ENGINEERS
14200 MIDWAY ROAD, SUITE 122		DALLAS, TEXAS
DESIGN	DRAWN	DATE
BMB	CAC	FEB-04
SCALE	NOTES	FILE
1"=30'	D.P.	24001 GRADING
NO.	NO.	
	C-4	



100 YEAR DETENTION POND CALCULATIONS

- DRAINAGE AREAS 1 CONTRIBUTES FLOW TO THE DETENTION POND - 1.04 ACRES
- DRAINAGE AREAS 2-3 BY PASS THE DETENTION POND - 0.04 ACRES
- SITE ALLOWABLE RELEASE RATE = "C" FACTOR = .35
 $Q = CIA$, $I_{100} = 7.56 \text{ IN/HR}$ (TC = 15 MIN.)
 $Q = \text{ALLOW} = (0.35)(7.56)(1.08 \text{ ACRES}) = 2.88$
- DETENTION POND ALLOWABLE RELEASE RATE =
 TOTAL Q_{ALLOW} 2.88 CFS
 TOTAL Q_{PASS} 0.35 CFS
 TOTAL Q_{CHANGE} 2.50 CFS
- STORAGE REQUIRED
 DETENTION AREA (A) 1.04 ACRES
 REFERENCE: TECHNICAL PAPER 40
 ALLOWABLE STORMWATER FLOW FROM DETENTION: 2.50

STORM DURATION DATA:

MIN	1-100YR (IN/HR)	C	AREA (ACRES)	TOTAL FLOW (CFS)	TOTAL FLOW (FT ³ /S)	OUTFLOW STORAGE (FT ³)	STORAGE (FT ³)
5	10.56	0.90	1.04	9.88	2985	1125	1840
10	8.25	0.90	1.04	8.31	4987	1500	3487
20	6.80	0.90	1.04	6.36	7638	2250	5388
30	5.70	0.90	1.04	5.34	8603	3000	5603
40	5.00	0.90	1.04	4.65	11232	3750	7482
50	4.40	0.90	1.04	4.12	12355	4500	7855
60	3.95	0.90	1.04	3.71	13344	5250	8094
70	3.60	0.90	1.04	3.37	14152	6000	8152
80	3.30	0.90	1.04	3.09	14828	6750	8076

- VOLUME PROVIDED IS EQUAL TO 516 LF OF 54" CONTECH STORAGE PIPE X 15.904 CFLF = 8,206 CF
- OUTFALL DESIGN - CRIFICE PLATE
 OUTFALL ELEVATION = 587.80
 MAX. 100 YR. WATER SURFACE = 595.15
 $Q = (0.62)(A)(2g^3h^3)^{1/4}$ WHERE $g = 32.2 \text{ ft/sec}^2$
 $A = \frac{3.14D^2}{4}$ $h = H + D$ $V = Q/A$
 $Q_{\text{ALLOW}} = 2.50$ CFS
 $D = 0.40$ FEET = 5.88 INCHES
 $H = 7.11$ FEET
 $A = 0.1686$ FEET²
 $V = 1.87$ FT/SEC
 $Q_{\text{CHANGE}} = 2.50$ CFS

DEVELOPED DRAINAGE AREA CALCULATION

NO.	AREA (ACRES)	C	I_{100} (IN/HR)	Q_{100} (CFS)	REMARKS
1	1.04	0.90	8.88	8.31	SHEET FLOW TO 10' C.I. (DETAINED)
2	0.03	0.90	8.88	0.24	SHEET FLOW TO BELT LINE (RELEASED)
3	0.01	0.90	8.88	0.08	SHEET FLOW TO SURVEYOR (RELEASED)
4	0.19	0.35	8.88	0.59	SHEET FLOW TO SURVEYOR
5	0.09	0.35	8.88	0.28	SHEET FLOW TO SURVEYOR
6	0.10	0.35	8.88	0.31	SHEET FLOW TO BELT LINE

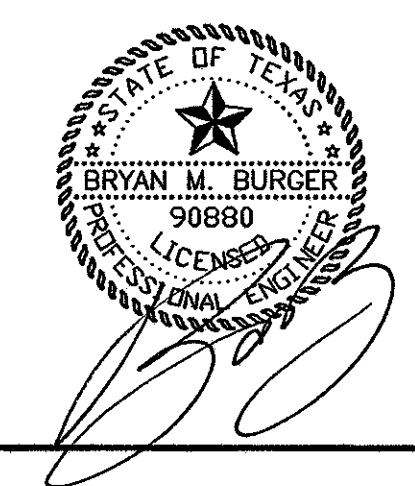
NOTE: SINCE AREAS 4-6 ARE TO REMAIN AS GRASS, THEY ARE NOT INCLUDED IN DETENTION CALCULATIONS & BYPASS THE DETENTION POND.

LEGEND

- ⊕ FIRE HYDRANT
- ⊗ CHEELED "X" SET
- ⊗ CHEELED "X" FOUND
- /X IRON ROD FOUND (SIZE AS NOTED)
- /X IRON ROD SET (SIZE AS NOTED)
- /X OVERHEAD UTILITY POLE W/ GUY
- /X UNDERGROUND ELECTRIC OR TELEPHONE
- /X LIGHT POLE
- /X SANITARY SEWER MANHOLE
- /X SAN. SWR. CLEAN OUT
- /X GAS VALVE
- /X WATER VALVE
- /X TREE
- PROPOSED CONTOUR
- EXISTING CONTOUR
- DRAINAGE DIVIDE
- DRAINAGE AREA NUMBER
- AREA/100



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 5/27/04



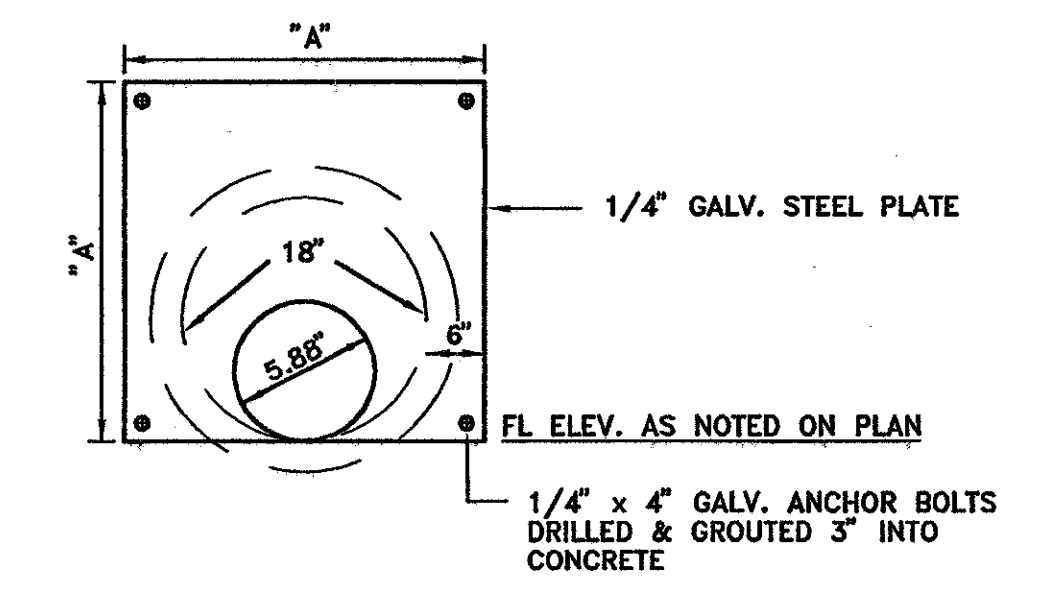
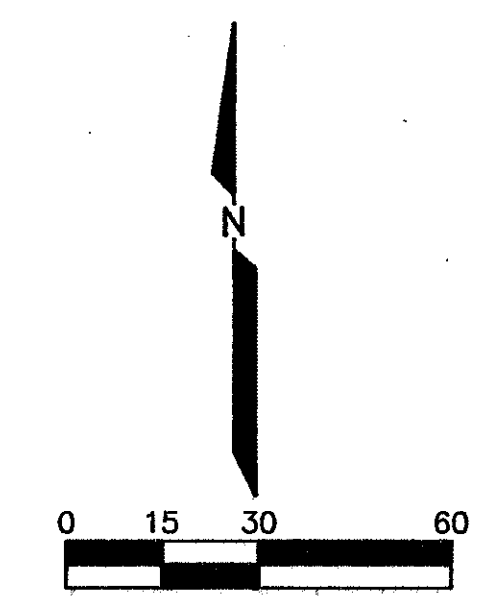
REV.	DATE	REMARKS

DRAINAGE AREA MAP

SOUTHRUST BANK
 BELT LINE - SURVEYOR VILLAGE ADDITION
 TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP
 14200 MIDWAY ROAD, SUITE 122 (972) 385-2272 CONSULTING ENGINEERS DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BMB	CAC	FEB-04	1"=30'	D.P.	24001 DAMAP	C-5



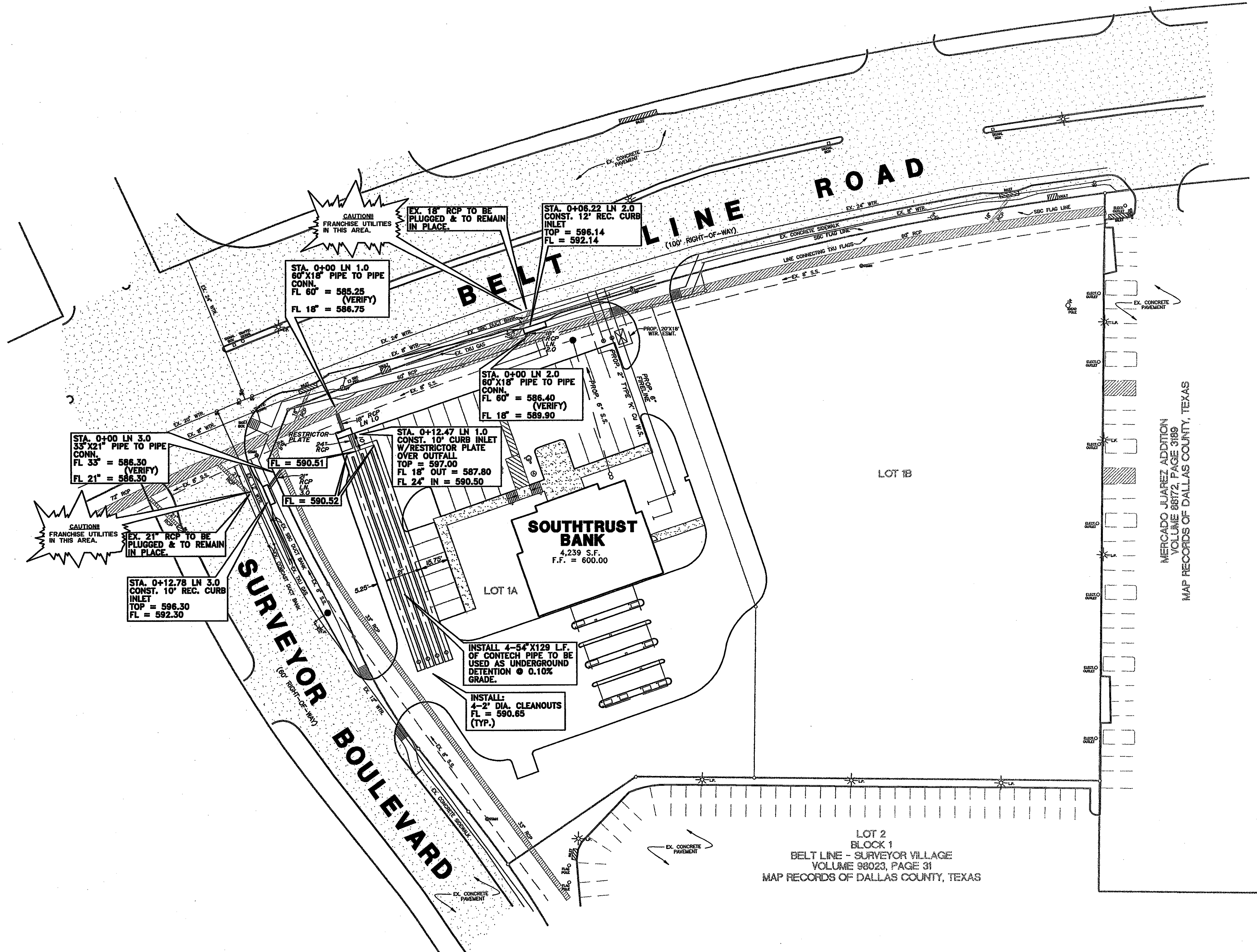
RESTRICTOR PLATE DETAIL
N.T.S.

LEGEND

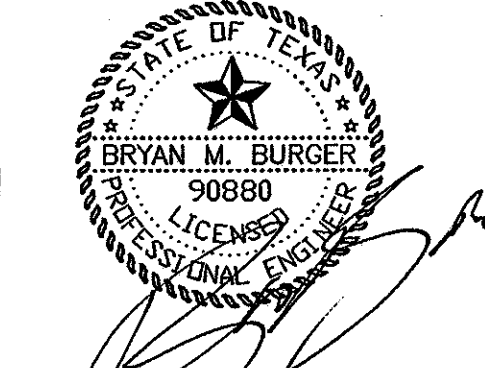
- EXIST. S.S.
- PROP. S.S.
- EXIST. WTR.
- PROP. WTR.
- PROP. STM. SWR.
- EXIST. STM. SEWER
- EXIST. STM. SEWER TO BE ABANDONED
- ⊙ WATER METER
- ⊥ GATE VALVE
- PROP. S.S. M.H.
- EXIST. FIRE HYDRANT
- OHE EXIST. OVER HEAD ELECTRIC

NOTE: ALL DIMENSION ARE TO FACE OF CURB UNLESS OTHERWISE NOTED

NOTE: UNDERGROUND DETENTION VAULTS TO BE PREMANUFACTURED CORRUGATED METAL PIPE MANUFACTURED BY CONTECH CONSTRUCTION PRODUCTS, INC. CONTRACTOR TO CONTACT GARY YOUNG @ (972)659-0826 FOR PIPE SPECIFICATIONS DETAILS & REINFORCEMENT ON DETENTION SYSTEM.



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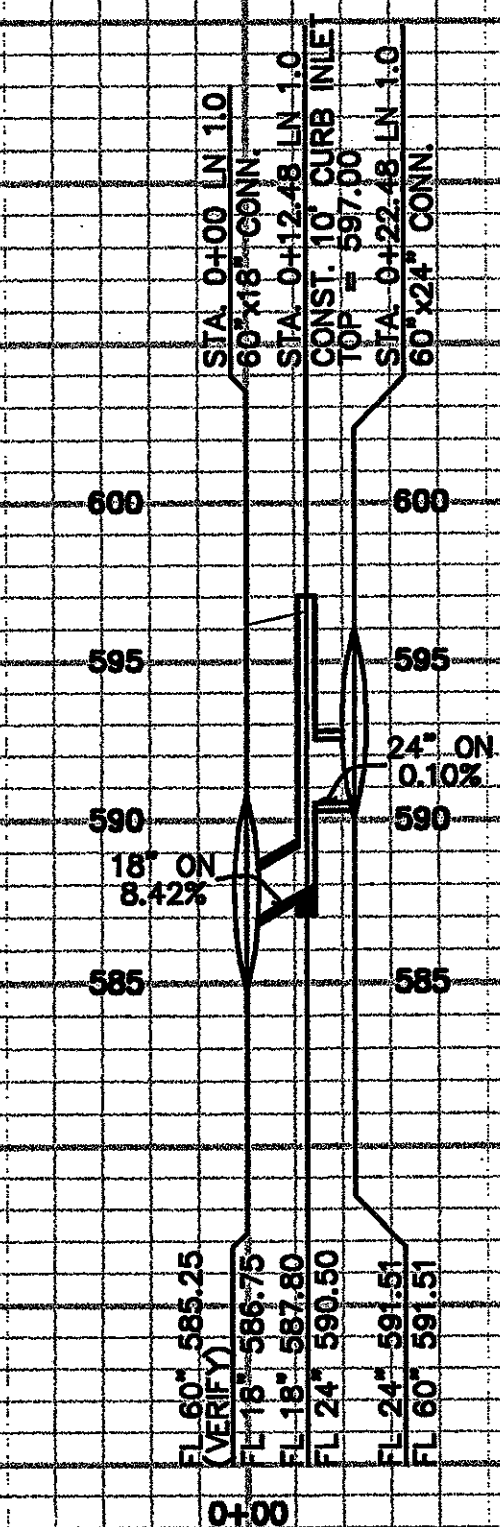
REV.	DATE	REMARKS

DRAINAGE PLAN

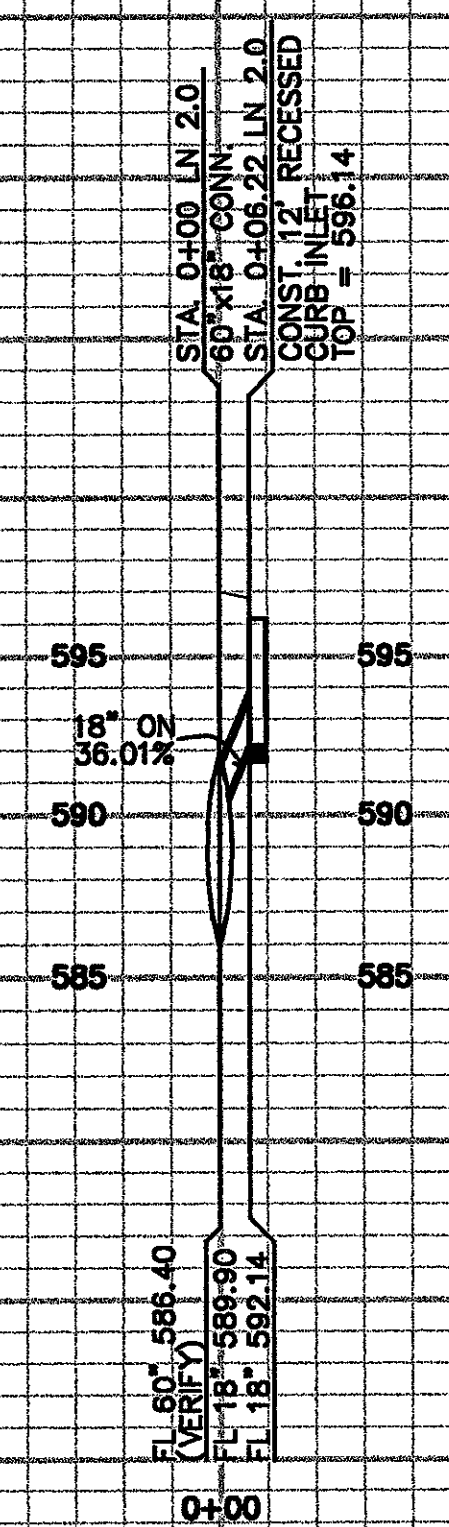
SOUTHTRUST BANK
BELT LINE - SURVEYOR VILLAGE ADDITION
TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP
14200 MIDWAY ROAD, SUITE 122 (972) 385-2272
CONSULTING ENGINEERS
DALLAS, TEXAS

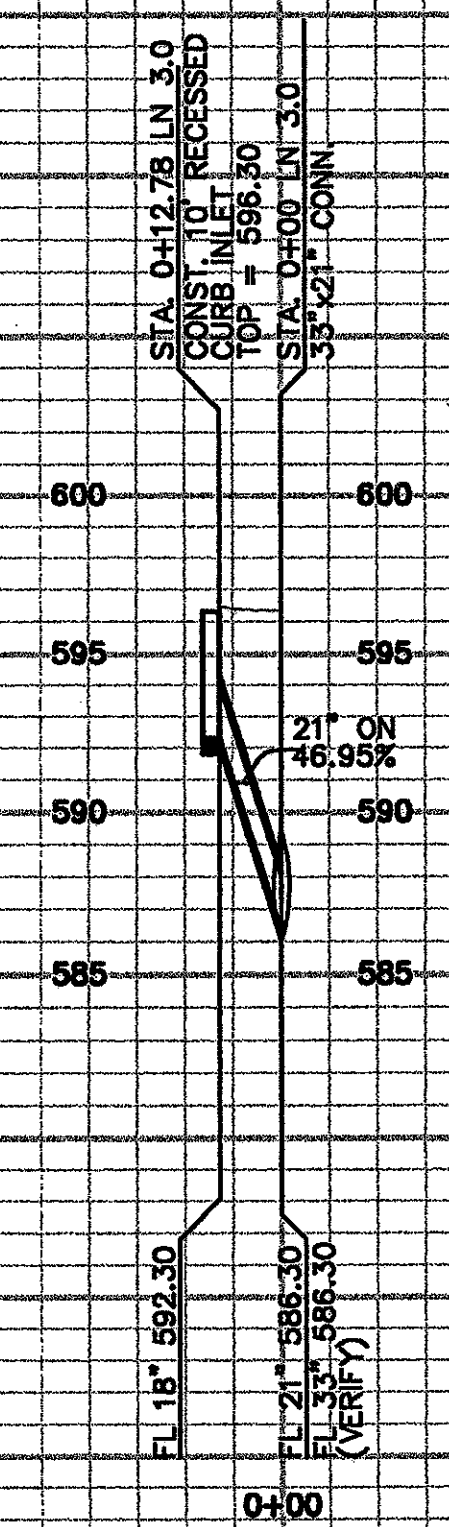
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BMB	JVW	FEB-04	1"=30'	D.P.	24001 DRAINAGE	C-6



STORM LINE 1.0

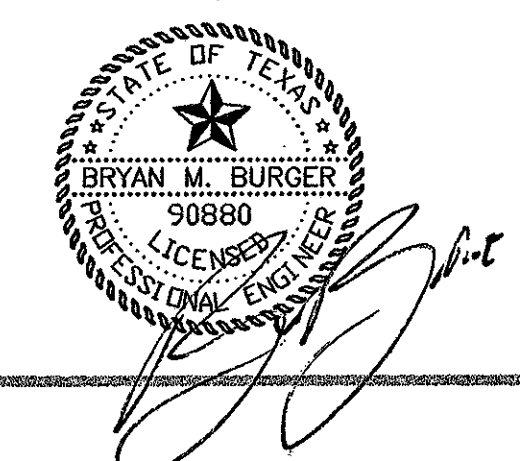


STORM LINE 2.0



STORM LINE 3.0

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REV.	DATE	REMARKS

STORM PROFILES

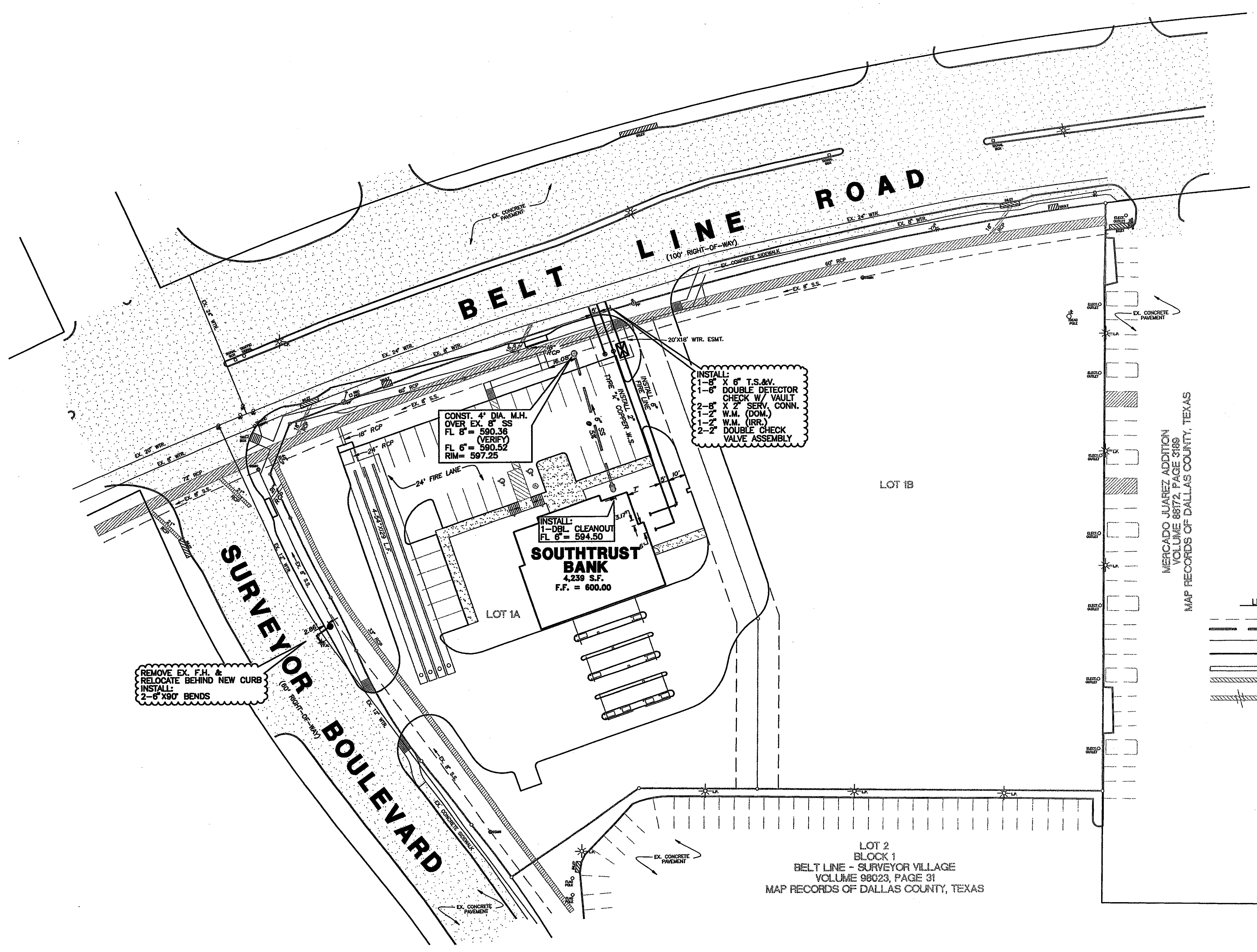
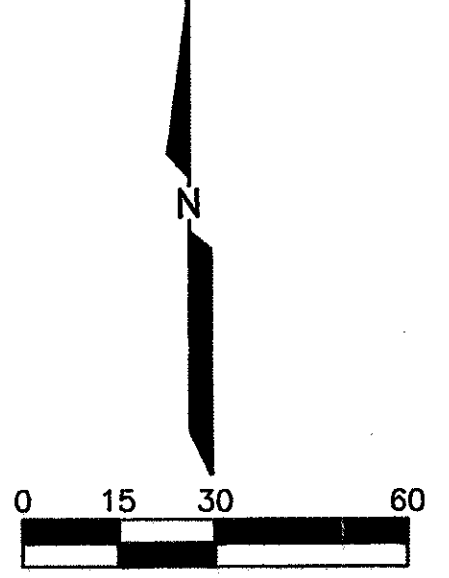
SOUTHTRUST BANK
BELT LINE- SURVEYOR VILLAGE ADDITION
TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., INC.
14200 MIDWAY ROAD, SUITE 122 (972) 385-2272
CONSULTING ENGINEERS DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
		FEB-04	1"=40' 1"=8'	D.P.	24001 PROFILES	C-7

WATER LINE GENERAL NOTES

1. ALL WORK AND MATERIALS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR THE CITY.
2. ALTERNATE - ALL 6", 8", 10" AND 12" WATER MAINS SHALL BE PVC AWWA C900, DR 14, CLASS 200 WATER PIPE. FOR PVC SERVICE TAPS 1" AND LARGER, TAPPING SADDLES SHALL BE USED. FIRE LINES SHALL BE 6309, CLASS 200 MINIMUM.
3. ALL WATER MAINS SHALL HAVE MINIMUM COVER AS FOLLOWS: 6", 8", 10", AND 12": 48" BELOW FINISHED PAVEMENT GRADE, OR 60" BELOW EXISTING OR FINISHED GRADE IN UNPAVED AREAS, OR AS REQUIRED TO CLEAR OTHER UTILITIES.
4. FIRE HYDRANTS TO BE CITY APPROVED. APPROVED FIRE HYDRANTS ARE: MAH, MULLER, & AVK.
5. VALVES TO BE CITY APPROVED.
6. THE WATER METER BOX SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AFTER THE PAVING CONTRACTOR HAS COMPLETED THE FINE GRADING BEHIND THE CURB. EACH SERVICE LOCATION WILL BE MARKED ON THE PAVEMENT OR CURB, WITH A BLUE DOT BY THE UTILITY CONTRACTOR AND TIED TO PROPERTY CORNERS ON THE "RECORD DRAWINGS."
7. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF ACCEPTANCE OF THE SYSTEM BY THE CITY.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD DRAWING" PLANS TO THE ENGINEER & TOWN OF ADDISON SHOWING THE LOCATION OF WATER SERVICES AND VALVES.
9. FIRE HYDRANTS SHALL BE PAINTED AS PER CITY STANDARDS AND SPECIFICATIONS AND LOCATED IN A PROTECTED AREA WITH 6" CURB OR BOLLARDS.
10. STEAMER NOZZLES ON FIRE HYDRANTS SHALL BE 18" ABOVE THE TOP OF THE CURB ON FINISHED GRADE, AND SHALL FACE THE CENTER OF THE FIRE LANE OR STREET. FIRE HYDRANTS SHALL USUALLY BE LOCATED FOUR (4) FEET, BUT NOT LESS THAN TWO (2) FEET NOR MORE THAN SIX (6) FEET, BEHIND THE CURB.
11. ALL WATER LINES SHALL BE HYDROSTATICALLY TESTED PER CITY STANDARDS AND SPECIFICATIONS.
12. ALL WATER LINES SHALL BE STERILIZED PER CITY STANDARDS AND SPECIFICATIONS.
13. ALL METER BOXES SHALL BE LOCATED IN NON-TRAFFIC AREAS.
14. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THAT NECESSARY CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO THE CONSTRUCTION OF ANY SUCH CROSSING.
15. UTILITY TRENCHES SHALL BE BACKFILLED WITH MATERIAL PER TOWN OF ADDISON SPECIFICATIONS.
16. ANCHOR FITTINGS SHALL BE USED TO ATTACH FIRE HYDRANTS.
17. ALL WATER SERVICES OUTSIDE OF EASEMENTS SHALL BE INSTALLED BY A PLUMBER.
18. CONTRACTOR TO INCLUDE ALL CITY REQUIRED MAINTENANCE BOND, INSPECTION, TAP, AND METER FEES IN BID. OWNER TO PAY IMPACT FEES.
19. NO WATER JETTING OF BACKFILL ALLOWED.
20. MEGA LUGS SHALL BE USED ON ALL BENDS, TEES, AND CHANGES IN DIRECTION.
21. FIRE LINES TO BE SIZED AND INSTALLED BY STATE OF TEXAS LICENSED FIRE SPRINKLER CONTRACTOR.

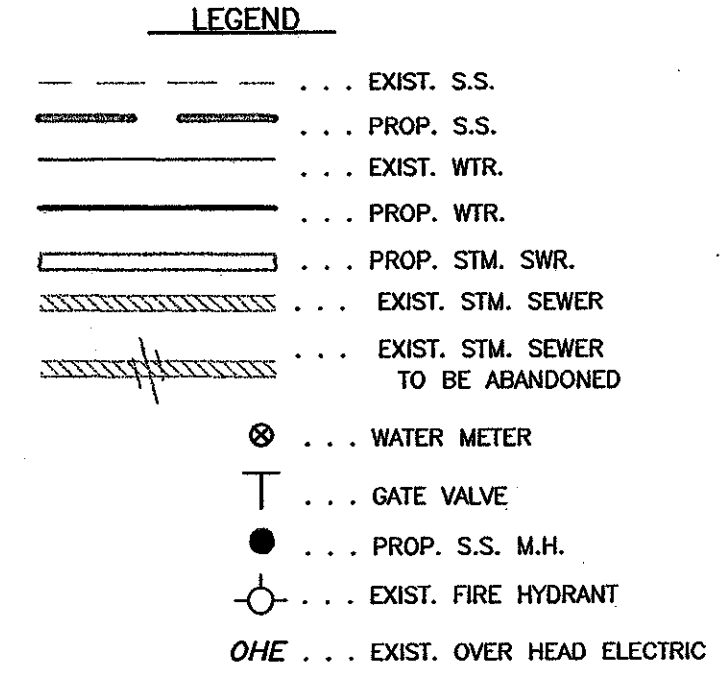


REMOVE EX. F.H. & RELOCATE BEHIND NEW CURB
INSTALL:
2-6" 90° BENDS

CONST. 4" DIA. M.H. OVER EX. 8" SS
FL 8" = 590.38 (VERIFY)
FL 6" = 590.52
RIM = 597.25

INSTALL:
1-6" X 6" T.S. & V. DOUBLE DETECTOR CHECK W/ VAULT
2-6" X 2" SERV. CONN. W.M. (DOM.)
1-2" W.M. (IRR.)
2-2" DOUBLE CHECK VALVE ASSEMBLY

INSTALL:
1-DBL CLEANOUT
FL 6" = 594.50



NOTE: ALL DIMENSION ARE TO FACE OF CURB UNLESS OTHERWISE NOTED

SANITARY SEWER GENERAL NOTES

1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO N.C.T.C.O.G. & THE TOWN OF ADDISON STANDARD SPECIFICATIONS.
2. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING.
3. CONTRACTOR SHALL COORDINATE WITH THE OWNER, ENGINEER OR HIS REPRESENTATIVE AND CITY REPRESENTATIVE REGARDING ANY DEVIATIONS FROM THESE PLANS.
4. CONTRACTOR SHALL MAINTAIN ONE SET OF RECORD DRAWINGS (AS BUILT) ON SITE WHICH WILL BE SUBMITTED TO THE ENGINEER & TOWN OF ADDISON UPON COMPLETION OF THIS PROJECT.
5. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT. ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, SEWER LATERALS, WATER SERVICE, ETC.
6. THE CONTRACTOR SHALL SET UTILITIES TO PROPER LINE AND GRADE PRIOR TO THE PLACING OF PERMANENT PAVEMENT.
7. SANITARY SEWER PIPE SHALL CONFORM TO CITY SPECIFICATIONS AND SHALL BE MANUFACTURED FROM ONE OF THE FOLLOWING MATERIALS:
 - a. Polyvinyl Chloride (PVC) Diameter 4" - 15" ASTM D 3034 SDR 35
8. SANITARY SEWER PIPE MUST BE KEPT CLEAR OF BROKEN CONCRETE, DIRT OR ANY OTHER DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS.
9. ALL SANITARY SEWER MAINS ARE TO HAVE 1-2" JOINT CENTERED ON EITHER SIDE OF WATER MAINS WHERE CROSSING OCCUR.
10. CONTRACTOR SHALL TIE A 1" WIDE PIECE OF RED PLASTIC FLAGGING TO THE END OF SEWER SERVICE AND SHALL LEAVE A MINIMUM OF 36" OF FLAGGING EXPOSED AFTER BACKFILL. AFTER CURB AND PAVING IS COMPLETED, CONTRACTOR SHALL MARK THE LOCATION OF THE SEWER SERVICE ON THE CURB IN ACCORDANCE WITH THE STANDARD CITY SPECIFICATIONS.
11. THE CONTRACTOR SHALL FURNISH A MAINTENANCE BOND TO THE CITY TO RUN TWO (2) YEARS FROM THE DATE OF FINAL ACCEPTANCE OF THE SYSTEM BY THE CITY.
12. ALL SANITARY SEWER LATERALS SHALL BE SIZED AND LOCATED AS SHOWN.
13. ALL SANITARY SEWER LATERALS LOCATED OUTSIDE OF ESMTS SHALL BE INSTALLED BY A PLUMBER.
14. CONTRACTOR TO INCLUDE ALL REQD. BONDS, TAP FEES, CAMERA FEES IN PROPOSAL.
15. ALL PROPOSED MANHOLES SHALL BE VACUUM TESTED.

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REV	DATE	REMARKS

WATER & SANITARY SEWER PLAN

SOUTHTRUST BANK

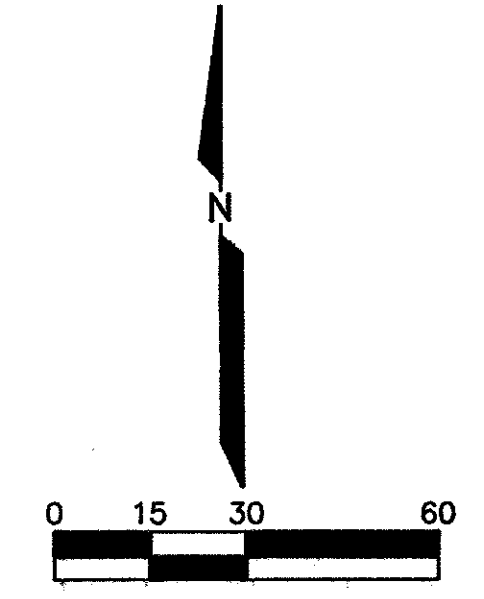
BELT LINE - SURVEYOR VILLAGE ADDITION

TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP
14200 MIDWAY ROAD, SUITE 122 (972) 385-2272
CONSULTING ENGINEERS DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BMB	JWV	FEB-04	1"=30'	D.P.	24001 WATSEW	C-8

- LEGEND**
- ⊕ FAL FIRE HYDRANT
 - ⊕ CHISELED "X" SET
 - ⊕ CHISELED "X" FOUND
 - ⊕ IRON ROD FOUND (SIZE AS NOTED)
 - ⊕ IRON ROD SET (SIZE AS NOTED)
 - ⊕ OVERHEAD UTILITY POLE W/ GUY
 - ⊕ UNDERGROUND ELECTRIC OR TELEPHONE
 - ⊕ LIGHT POLE
 - ⊕ SANITARY SEWER MANHOLE
 - ⊕ SAN. SWR. CLEAN OUT
 - ⊕ GAS VALVE
 - ⊕ WATER VALVE
 - ⊕ TREE

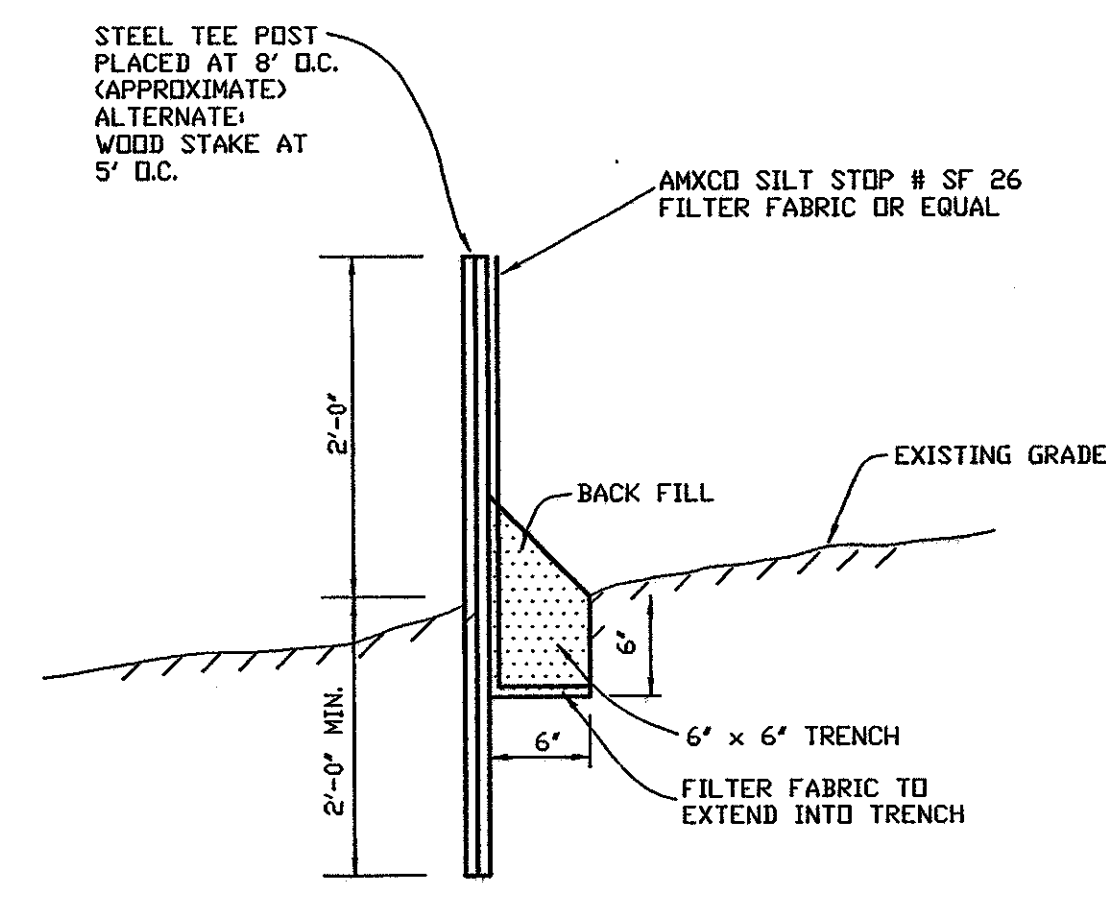


EROSION CONTROL GENERAL NOTES

1. GENERAL CONTRACTOR AND OWNER ARE RESPONSIBLE FOR PREVENTING THE FLOW OR OFF-SITE TRACKING OF SEDIMENT AND OTHER POLLUTANTS TO EXISTING STREETS AND ADJACENT PROPERTIES.
2. ALL POINTS USED AS AN EXIT FROM AREAS OF EXPOSED SOIL MUST HAVE A ROCK STABILIZED CONSTRUCTION ENTRY/EXIT FIFTY FEET (30') IN LENGTH WITH THREE INCH (3") DIAMETER STONE COVER. GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS POINTS AND PREVENTING EXIT AT UNPROTECTED LOCATIONS.
3. IF "SUMP" PUMPS ARE USED TO REMOVE WATER FROM EXCAVATED AREAS, FILTER THE DISCHARGE TO REMOVE SEDIMENT AND OTHER POLLUTANTS BEFORE THE WATER LEAVES THE SITE.
4. PERIMETER EROSION CONTROL MEASURES AND THE ROCK STABILIZED CONSTRUCTION EXIT MUST BE IN PLACED BEFORE STARTING SOIL DISTURBANCE.
5. DISTURBED SOIL MUST BE STABILIZED WITHIN 14 DAYS IN AREAS WHERE GRADING IS TEMPORARILY OR PERMANENTLY STOPPED FOR MORE THAN 21 DAYS.
6. ALL SURFACE AREAS DISTURBED WITHIN OR ADJACENT TO THE CONSTRUCTION LIMITS MUST BE PERMANENTLY STABILIZED. STABILIZATION IS OBTAINED WHEN THE SITE IS COVERED WITH IMPERVIOUS STRUCTURES, PAVING OR A UNIFORM PERENNIAL VEGETATIVE COVER. THE PERENNIAL VEGETATION MUST HAVE A COVERAGE DENSITY OF AT LEAST 70 PERCENT. STABILIZATION IS REQUIRED BEFORE TERMINATING MAINTENANCE AND REMOVAL OF EROSION CONTROL MEASURES.
7. THE GENERAL CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT LEAST ONCE EACH WEEK AND WITHIN 24 HOURS AFTER A STORM EVENT OF 0.5 INCH OR GREATER TO MAINTAIN FUNCTION OF THE CONTROLS. MAINTENANCE IS CRUCIAL TO EROSION CONTROL EFFECTIVENESS. EROSION CONTROL MEASURES THAT PROVE TO BE INEFFECTIVE SHALL BE REPLACED WITH MORE EFFECTIVE MEASURES OR ADDITIONAL MEASURES.
8. FOR DETAILS OF STABILIZATION AND EROSION CONTROL MEASURES, REFER TO THE CONSTRUCTION BEST MANAGEMENT PRACTICES (BMP) MANUAL PUBLISHED BY NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS.

CONSTRUCTION SEQUENCE

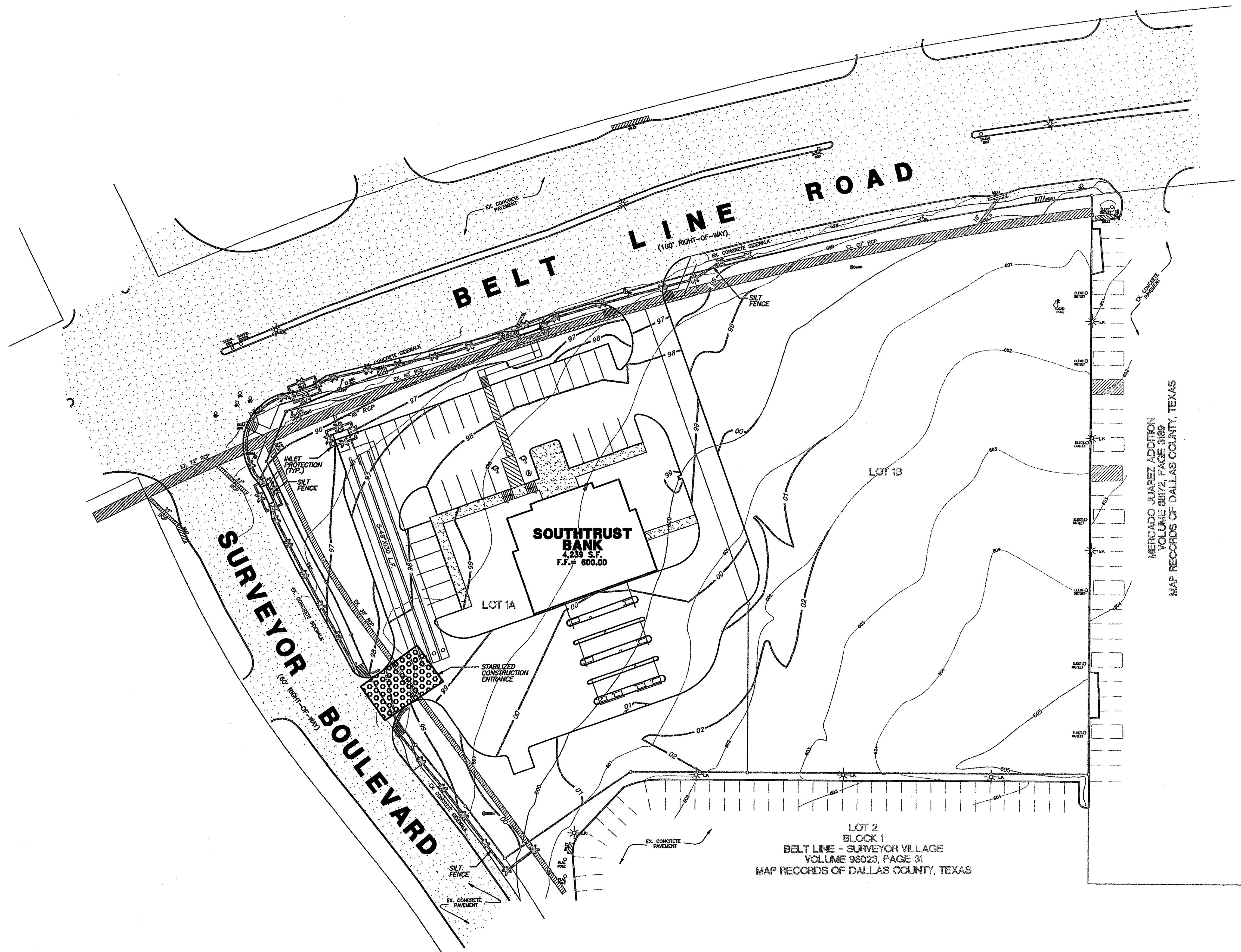
1. OBTAIN GRADING PERMIT.
2. INSTALL ALL EROSION CONTROL MEASURES AND DEVICES THAT CAN BE INSTALLED PRIOR TO SITE CLEARING.
3. CLEAR SITE.
4. INSTALL ANY REMAINING CONTROL MEASURES AND DEVICES THAT COULD NOT BE INSTALLED PRIOR TO SITE CLEARING.
5. GRADE SITE.
6. INSTALL ALL UNDERGROUND UTILITIES. INSTALL EROSION CONTROL AROUND CATCH BASINS AND INLETS.
7. INSTALL PAVEMENT.
8. INSPECT AND MAINTAIN ALL EROSION MEASURES UNTIL ALL DISTURBED OFFSITE & ONSITE AREAS HAVE BEEN HYDROMULCHED OR SODDED (IN ACCORDANCE WITH THE LANDSCAPE PLAN) AND A MOWABLE STAND OF GRASS IS ACHIEVED.



EROSION CONTROL FENCE
N.T.S.



NOTE:
CONTRACTOR SHALL MAINTAIN SILT FENCE THROUGHOUT DURATION OF PROJECT.



MERCADO JUAREZ ADDITION
VOLUME 88172 PAGE 3189
MAP RECORDS OF DALLAS COUNTY, TEXAS

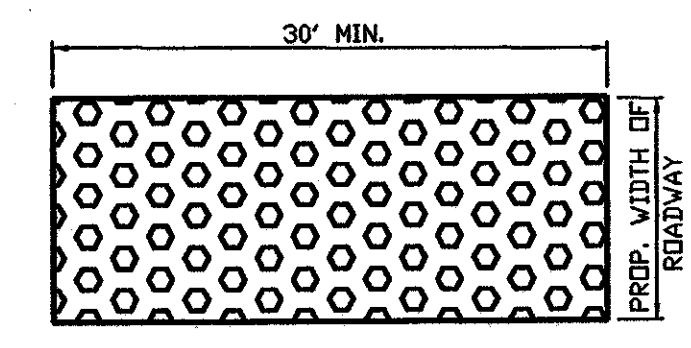
LOT 2
BLOCK 1
BELT LINE - SURVEYOR VILLAGE
VOLUME 98023, PAGE 31
MAP RECORDS OF DALLAS COUNTY, TEXAS

STABILIZED CONSTRUCTION ACCESS

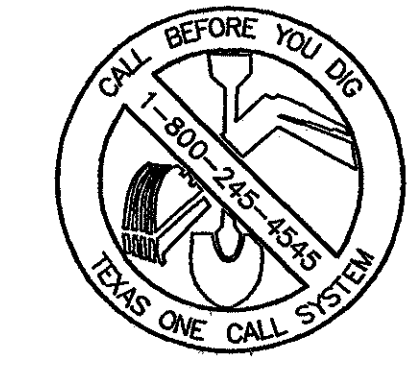
A STABILIZED CONSTRUCTION ACCESS ENTRANCE APPLIES TO POINTS OF CONSTRUCTION INGRESS AND EGRESS WHERE SEDIMENT MAY BE TRACKED OR FLOW OFF OF THE CONSTRUCTION SITE.

A STABILIZED CONSTRUCTION ACCESS ENTRANCE WILL BE INSTALLED AT THE LOCATION SHOWN ON THE PLAN. THIS ENTRANCE SHALL CONSIST OF A FILTER FABRIC COVERED BY A MINIMUM OF 8" OF SUITABLE ROCK OR CRUSHED STONE.

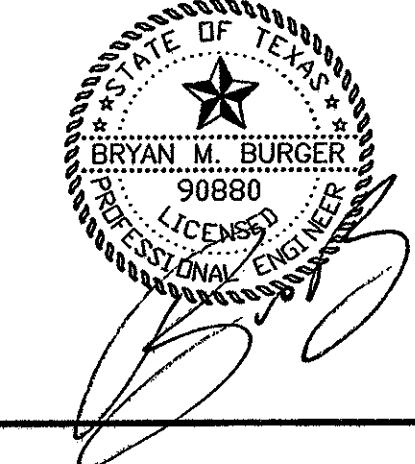
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT THE TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL MATERIAL OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.



STABILIZED CONSTRUCTION ACCESS DETAIL



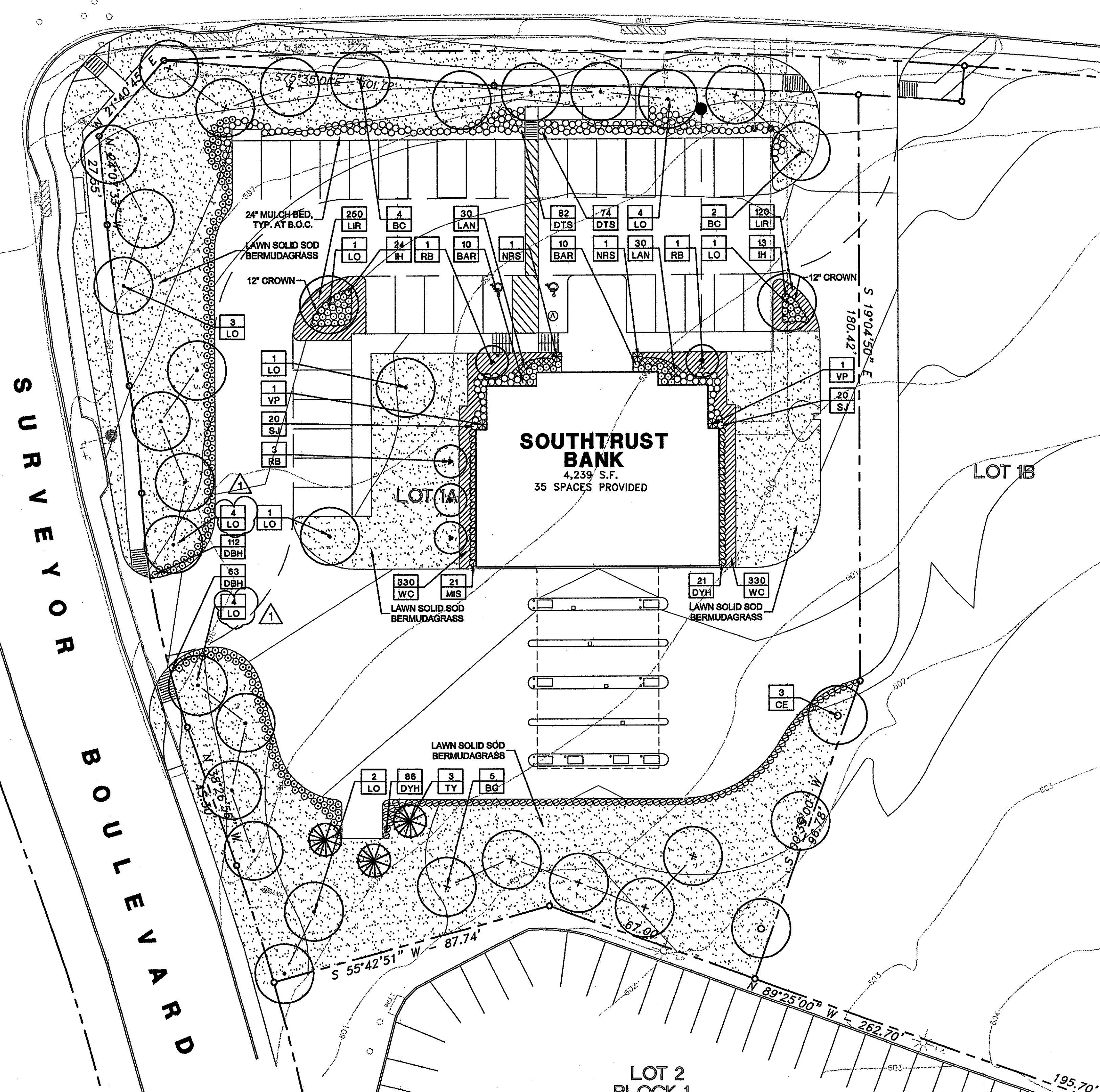
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRYAN M. BURGER, P.E. 90880 ON 5/27/09



REV.	DATE	REMARKS

EROSION CONTROL PLAN						
SOUTHTRUST BANK						
BELT LINE - SURVEYOR VILLAGE ADDITION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 (972) 395-2272				CONSULTING ENGINEERS DALLAS, TEXAS		
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
BMB	CAC	FEB-04	1"=30'	D.P.	24001 EROS	C-9

BELT LINE ROAD



**LOT 2
BLOCK 1
BELT LINE - SURVEYOR VILLAGE
VOLUME 98023, PAGE 31
MAP RECORDS OF DALLAS COUNTY, TEXAS**

LANDSCAPE NOTES

- Contractor shall verify all existing and proposed site elements and notify Architect of any discrepancies. Survey data of existing conditions was supplied by others.
- Contractor shall locate all existing underground utilities and notify Architect of any conflicts. Contractor shall exercise caution when working in the vicinity of underground utilities.
- Contractor is responsible for obtaining all required landscape and irrigation permits.
- Contractor to provide a minimum 2% slope away from all structures.
- All planting beds and lawn areas to be separated by steel edging. No steel to be installed adjacent to sidewalks or curbs.
- All landscape areas to be 100% irrigated with an underground automatic irrigation system and shall include rain and freeze sensors.
- All lawn areas to be Solid Sod Bermudagrass, unless otherwise noted on the drawings.

MAINTENANCE NOTES

- The Owner, tenant and their agent, if any, shall be jointly and severally responsible for the maintenance of all landscape.
- All landscape shall be maintained in a neat and orderly manner at all times. This shall include mowing, edging, pruning, fertilizing, watering, weeding and other such activities common to landscape maintenance.
- All landscape areas shall be kept free of trash, litter, weeds and other such material or plants not part of this plan.
- All plant material shall be maintained in a healthy and growing condition as is appropriate for the season of the year.
- All plant material which dies shall be replaced with plant material of equal or better value.
- Contractor shall provide separate bid proposal for one year's maintenance to begin after final acceptance.

GENERAL LAWN NOTES

- Fine grade areas to achieve final contours indicated on civil plans.
- Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may stand.
- All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction Manager.
- Contractor shall provide (2") two inches of imported topsoil on all areas to receive lawn. ADD ALTERNATE.
- Imported topsoil shall be natural, friable soil from the region, known as bottom land soil, free from lumps, clay, toxic substances, roots, debris, vegetation, stones, containing no salt and black to brown in color.
- All lawn areas to be fine graded, irrigation trenches completely settled, and finish grade approved by the Owner's Construction Manager or Architect prior to installation.
- All rocks 3/4" diameter and larger, dirt clods, sticks, concrete spalls, etc. shall be removed prior to placing topsoil and any lawn installation.

SOLID SOD NOTES

- Fine grade areas to achieve final contours indicated. Leave areas to receive topsoil 3" below final desired grade in planting areas and 1" below final grade in turf areas.
- Adjust contours to achieve positive drainage away from buildings. Provide uniform rounding at top and bottom of slopes and other breaks in grade. Correct irregularities and areas where water may stand.
- All lawn areas to receive solid sod shall be left in a maximum of 1" below final finish grade. Contractor to coordinate operations with on-site Construction Manager.
- Contractor to coordinate with on-site Construction Manager for availability of existing topsoil.
- Plant sod by hand to cover indicated area completely. Insure edges of sod are touching. Top dress joints by hand with topsoil to fill voids.
- Roll grass areas to achieve a smooth, even surface, free from unnatural undulations.
- Water sod thoroughly as sod operation progresses.
- Contractor shall maintain all lawn areas until final acceptance. This shall include, but not limited to: mowing, watering, weeding, cultivating, clearing and replacing dead or bare areas to keep plants in a vigorous, healthy condition.
- Contractor shall guarantee establishment of an acceptable turf area and shall provide replacement from local supply if necessary.
- If installation occurs between September 1 and March 1, all sod areas to be over-seeded with Winter Ryegrass, at a rate of (4) pounds per one thousand (1000) square feet.

PLANT LEGEND

SYMBOL	PLANT TYPE
BAR	Crimson Pigmy Barbary
BC	Bald Cypress
CE	Cedar Elm
DBH	Dwarf Burford Holly
DTS	Dwarf Texas Sage
DYH	Dwarf Yaupon Holly
IH	Indian Hawthorne
LAN	Lantana
LG	Liriope Gigantea
LO	Live Oak
MIS	Miscanthus
NRS	Nellie R. Stevens Holly
RB	Redbud 'Oklahoma'
SJ	Seagreen Juniper
TYH	Tree Yaupon Holly
VP	Variiegated Privet
WC	Wintercreeper

PLANT LIST

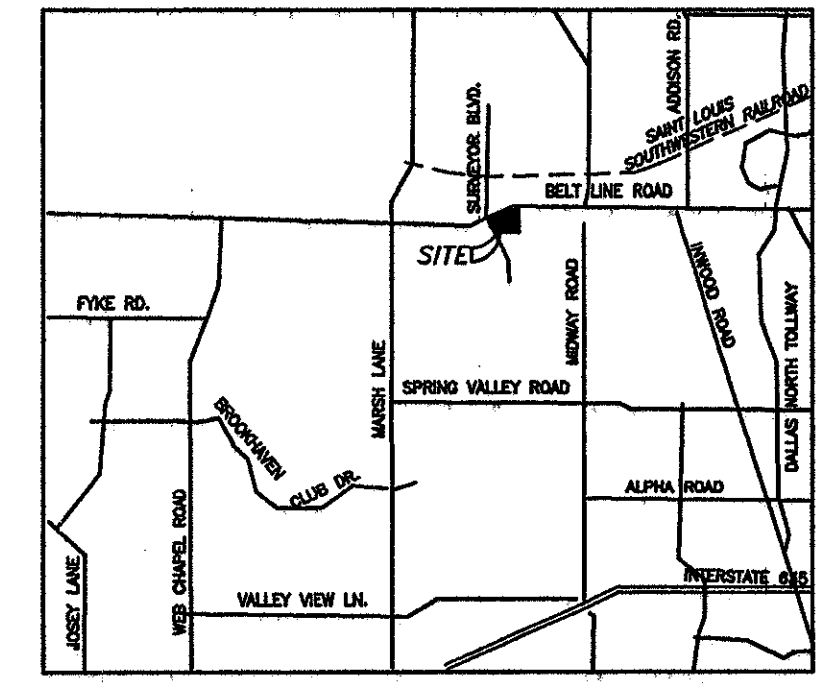
BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS
<i>Cercis canadensis</i> 'Oklahoma'	Redbud 'Oklahoma'	5	3" cal.	B&B, 10' ht. min., 4' spread min.
<i>Ilex vomitoria</i>	Tree Yaupon Holly	3	8' ht.	B&B, multi-trunk, 4' spread, matching
<i>Quercus virginiana</i>	Live Oak	21	4" cal.	cont. 15' ht., 5' spread, 5' branching ht., matching, 3" cal. min.
<i>Taxodium distichum</i>	Bald Cypress	11	4" cal.	B&B, 15' ht., 5' spread, 5' branching ht., matching
<i>Ulmus crassifolia</i>	Cedar Elm	3	4" cal.	B&B, 15' ht., 5' spread, 5' branching ht.

NOTE: ALL TREES TO HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES

SHRUBS/GROUND COVER	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	REMARKS
Berberis thunbergii	Crimson Pigmy Barbary	Crimson Pigmy Barbary	20	3 gal.	cont. full, 24" spread, 18" o.c.
Eucymia fortunei	'Coccoloba'	Wintercreeper	650	4" pots	cont. (3) 12" runners min., 12" o.c.
Ilex cornuta	'Burfordi Nasau'	Dwarf Burford Holly	175	5 gal.	cont. full, 20" spread, 24" o.c.
Ilex vomitoria	'Nana'	Dwarf Yaupon Holly	107	5 gal.	cont. full, 20" spread, 24" o.c.
Juripogon chinensis	'Sea Green'	Sea Green Juniper	40	5 gal.	cont. full, 24" spread, 35" o.c.
Lantana florida		Texas Lantana	60	4" pots	cont. (3) 12" runners min., 12" o.c.
Leucophyllum frutescens	'Compassion'	Dwarf Texas Sage	155	5 gal.	cont. full, 24" spread, 24" o.c.
Ligustrum lucidum	'Variiegati'	Variiegated Privet	2	7 gal.	cont. full, 35" ht.
Miscanthus sinensis	'Gracillimus'	Miscanthus	21	3 gal.	cont. full, 24" o.c., 18" ht.
Raphiolepis indica	'Clara'	Indian Hawthorne	37	5 gal.	cont. full, 20" spread, 24" o.c.
Ilex x 'Nellie R. Stevens'		Nellie R. Stevens Holly	2	7 gal.	cont. full, 35" ht., 35" spread
Liriope 'Gigantea'		Liriope 'Gigantea'	370	4" pots	cont. full top of cont. 12" o.c. refer to notes
Cynodon dactylon		Common Bermudagrass			

NOTE: Plant list is an aid to bidders only. Contractor shall verify all quantities on plan. All heights and spreads are minimums. All plant material shall meet or exceed remarks as indicated.

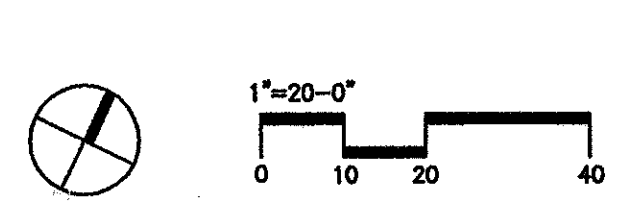
VICINITY MAP



LANDSCAPE TABULATIONS

REQUIREMENTS	PROVIDED
SITE REQUIREMENTS Requirements: 20% of gross site to be landscape Total Site: 56,107 s.f. Required: 11,221 s.f. (20%)	Provided: 22,656 s.f. (40%)
STREET FRONTAGE Requirements: 20' buffer along street frontage (1) tree 4" cal. per 20 L.F., (9) shrubs per 20 L.F.	
Belt Line Road: 204 L.F. Required: (10) trees, 4" cal. (80) shrubs, 5 gal.	Provided: (10) trees, 4" cal. (150) shrubs, 5 gal.
Surveyor Boulevard: 285 L.F. Required: (13) trees, 4" cal. (100) shrubs, 5 gal.	Provided: (13) trees, 4" cal. (160) shrubs, 5 gal.
PARKING LOT SCREEN Requirements: 20" ht., 3" o.c., double staggered row	Provided: 24" ht., 3" o.c. linear row

REQUIREMENTS	PROVIDED
PERIMETER LANDSCAPE Requirements: 5' wide buffer, (1) 4" cal. tree and (8) shrubs per 35 L.F.	
South Property Line: 154 L.F. Required: (5) trees, 4" cal. (35) shrubs, 5 gal.	Provided: (5) trees, 4" cal. (75) shrubs, 5 gal.
East Property Line: 96 L.F. Required: (3) trees, 4" cal. (24) shrubs, 5 gal.	Provided: (3) trees, 4" cal. (23) shrubs, 5 gal.
PARKING LOT - INTERIOR LANDSCAPE Requirement: 8% of the parking area must be landscape Parking lot: 13,963 s.f. Required: 1,080 s.f. (8%)	Provided: 1,051 s.f. (7.6%)
PARKING LOT Requirement: (1) tree per 10 regular spaces Total Parking: 35 spaces Required: (3) trees	Provided: (3) trees, 4" cal.



REV.	DATE	CITY COMMENTS	REMARKS
1	4.23.04		

LANDSCAPE PLAN

SOUTHTRUST BANK

BELT LINE - SURVEYOR VILLAGE ADDITION

TOWN OF ADDISON, TEXAS

LAWRENCE A. CATES & ASSOC., LLP		CONSULTING ENGINEERS	
14200 MIDWAY ROAD, SUITE 122		(972) 385-2272	
DALLAS, TEXAS		DALLAS, TEXAS	

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.S.	M.S.	02.23.04	1"=20'			L1.01

LANDSCAPE SPECIFICATIONS

SECTION 02900

PART 1 - GENERAL

1.1 REFERENCES

A. Refer to bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

A. Work includes: Furnish all supervision, labor, materials, services, equipment and supplies required to complete the work covered in conjunction with the landscaping outlined in these specifications and landscaping plans, including:

1. Planting (trees, shrubs, and grass)
2. Bed preparation and fertilization
3. Irrigation of shrubs
4. Water and maintenance until final acceptance
5. Guarantee

1.3 REFERENCES

- A. American Standard for Nursery Stock published by American Association of Nurserymen: 27 October 1980, Edition by American National Standards Institute, Inc. (ANSI) Plant Material.
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grasses and Standards.
- D. Hortia Third, 1979 - Cornell University.

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- A. The Contractor shall, within ten (10) days following acceptance of bid, notify the Architect/Owner of the sources of plant materials and bed preparation required for the project.
- B. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, and crushed stone. Samples shall be approved by Architect before use on project.
- C. Product Data: Submit complete product data and specifications on all other specified materials.
- D. Submit three representative samples of each variety of ornamental trees, shrubs, and groundcover plants for Architect's approval. When approved, tag, label, and maintain as representative samples for final installed plant materials.
- E. File Certificate of inspection of plant material by state, county, and federal authorities with Architect, if required.
- F. Soil Analysis: Provide sandy loam soil analysis if requested by the Architect.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list. Prior to Landscape Contractor installing any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below the ground surface. All areas not to be finished shall be covered with approved driveway and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. General Contractor shall provide topsoil as described in Section 02900 - Earthwork. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

Section 02900 - 01

PART 3 - EXECUTION

3.1 BED PREPARATION & FERTILIZATION

A. Landscape Contractor to inspect all existing conditions and report any deficiencies to the Owner.

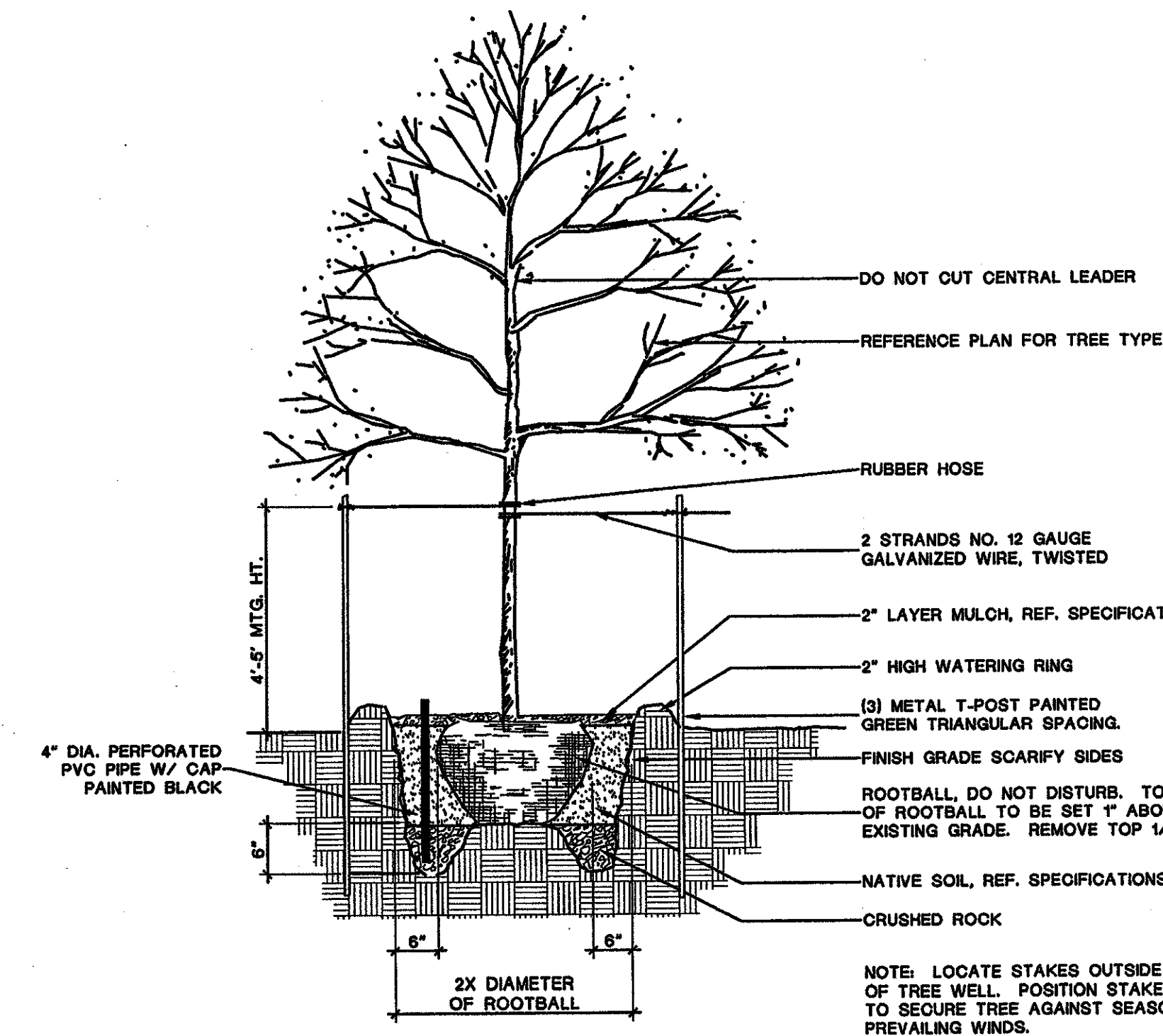
B. All planting areas shall be conditioned as follows:

1. Prepare new planting beds by scraping away existing grass and weeds as necessary. Fill existing soil to a depth of six inches prior to fertilizer and compost application. Apply fertilizer as per manufacturer's recommendations. Add application. Apply fertilizer to a depth of six (6") inches of the soil. Add application of fertilizer such as Sustane or Green Sense at the rate of twenty (20) pounds per one thousand (1,000) square feet.
2. All planting bed areas shall receive a two (2") inch layer of specified mulch.
3. Backfill for tree pits shall be as follows: Use existing topsoil on site, free from large clumps, roots, debris, rocks, etc., placed in nine (9") inch layers and watered in thoroughly.

C. Grass Area:

1. Areas to be Solid Sod Bermudagrass: Blocks of sod should be laid joint to joint, staggered joints after laying the ground first. Roll grass areas to achieve a smooth, even surface. The joints between the blocks of sod should be filled with topsoil where they are evidently exposed upon, then watered thoroughly.
2. Areas to be Hydromed Common Bermudagrass: Hydromed with bermudagrass seed at a rate of two (2) pounds per one thousand (1,000) square feet. Use a 4" x 8" batter board against the bed areas.

Section 02900 - 05



01 TREE PLANTING DETAIL
NOT TO SCALE

1.6 MAINTENANCE AND GUARANTEE

A. Maintenance:

1. The Landscape Contractor will be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show a healthy growth and satisfactory foliage condition.
2. Maintenance shall include watering of trees and plants, cultivation, weeding, spraying, edging, pruning of trees, mowing of grass, cleaning up and all other work necessary for maintenance.
3. Written maintenance final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by Owner and Landscape Contractor will be completed prior to written acceptance.
4. After final acceptance of installation, the Landscape Contractor will not be required to do any of the above listed work.

B. Guarantee:

1. Trees shall be guaranteed for a twelve (12) month period after acceptance. Shrubs and groundcover shall be guaranteed for twelve (12) months. The Landscape Contractor shall replace all dead, damaged, or trees which have partially died so that the condition of the planting is the same as when originally specified. In such cases, the option of the Owner shall be final.
- a. Plants used for replacement shall be of the same kind and size as those originally specified and shall be planted as originally specified. All work, including materials, labor and equipment used in replacement, shall carry a twelve (12) month guarantee. Any damage, including trees in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
- b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.
- c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and inspected for full compliance with Contract requirements. All replacements are to be included under "Work" of this section.
2. The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final installation.
3. Fertilization: Fertilization guarantee shall not apply where plants die after acceptance because of injury by storms, hail, freeze, insects, disease, injury by humans, machines or theft.
4. Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a completed, unobscured condition, and there is a stand of grass in lawn areas. At this time, the Owner will assume maintenance on the completed work.

1.7 QUALITY ASSURANCE

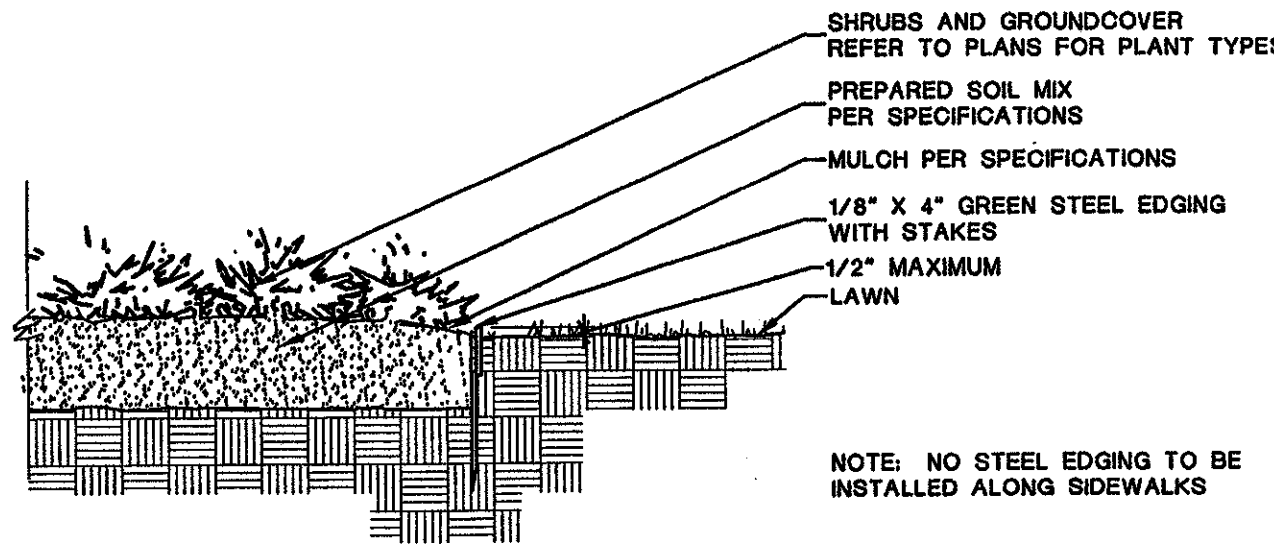
- A. General: Comply with applicable Federal, State, County, and Local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full-time supervision by a qualified person acceptable to Landscape Architect.
- C. Selection of Plant Material:
 1. Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance, watering and fertilization which will insure the purchased materials will meet and/or exceed project specifications.
 2. Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.
 3. Owner and/or Architect shall inspect all plant materials, when reasonable, at place of growth for conditions with requirements for genus, species, cultivar/variety, size and quality.

Section 02900 - 02

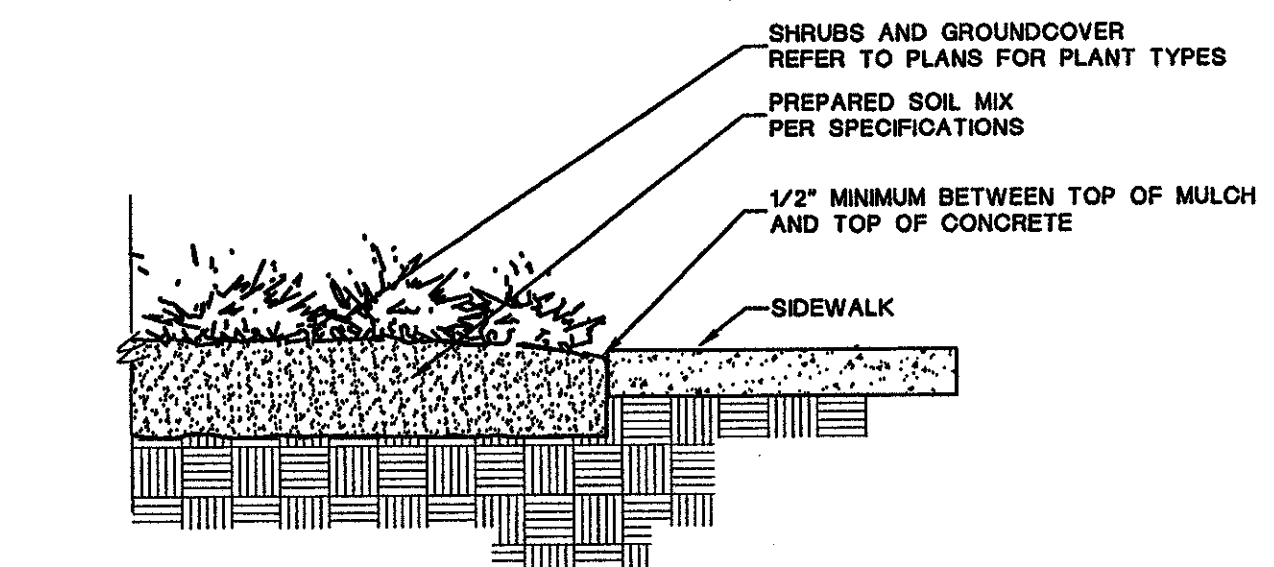
3.2 INSTALLATION

- A. Maintenance of plant materials shall begin immediately after each plant is delivered to the site and shall continue until all construction has been satisfactorily completed.
- B. Plant materials shall be delivered to the site only after the beds are prepared and are ready for planting. All specimens of nursery materials shall be fully protected from the drying winds during transit. All plants which cannot be planted at once, after delivery to the site, shall be kept in their containers and protected from wind and sun. Balls of earth of B & B plants shall be kept covered with soil or other acceptable material. All plants remain the property of the Contractor until final acceptance.
- C. Position the trees and shrubs in their intended location as per plan.
- D. Notify the Landscape Architect for inspection and approval of all positioning of plant materials.
- E. Excavate pits with vertical edges and horizontal bottom. Tree pits shall be large enough to permit landing and planting without injury to balls of earth or roots and shall be of such depth that, when planted and settled, the crown of the plant shall bear the same relation to the finish grade that it did to soil surface in place of growth.

Section 02900 - 06



02 STEEL EDGING DETAIL
NOT TO SCALE



04 SIDEWALK / MULCH DETAIL
no steel along sidewalks NOT TO SCALE

1.7 QUALITY ASSURANCE

C. Selection of Plant Material (cont.)

4. Owner and/or Architect retains the right to further inspect all plant material upon arrival at the site and during installation for size and condition of root balls, limbs, branching habit, insects, diseases, and latent defects.
5. Owner and/or Architect may reject unsatisfactory or defective material at any time during the process of work. Rejected material shall be removed from the site immediately. Plants damaged in transit or at job site shall be rejected.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Preparation:
 1. Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, and limbs.
 2. Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.
- B. Delivery:
 1. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and storage and watering facilities are available on job site.
 2. Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
 3. Protect root balls by burlapping with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.
 4. Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
 5. Notify Architect of delivery schedule 72 hours in advance so plant material may be observed upon arrival at job site.
 6. Remove rejected plant material immediately from site.
 7. To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

PART 2 - PRODUCTS

2.1 PLANTS

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from top of root balls to nominal top of plants. Plant spread refers to nominal outer diameter of the plant, not to the outer leaf tips. Plants shall be approved by the Architect and his decision as to their acceptability shall be final.
- B. Cultivation: The drawings and specifications are complementary anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Control all quantities on plan.
- C. Quality and Storage: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well shaped, full branched, and well rooted. The plants shall be free from fibrous insects, diseases, insect damage, and shall be of specimen quality. Objectionable disfigurements, insect eggs and larvae and are to be of specimen quality.
- D. Approval: All plant materials shall be subject to approval of the Owner and/or Landscape Architect. All plants showing any condition of growth or in any way unsatisfactory, badly shaped, or undersized condition, shall be rejected by the Landscape Architect and replaced with acceptable plants as specified.
- E. Trees shall be healthy, full branched, well shaped, and shall meet the trunk diameter and height requirements of the plant schedule. Balled and burlapped shall be firm, neat, slightly tapered, and well wrapped in burlap. Air line holes in the ball or with broken ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, diameter six (6") inches above ball.
- F. Nonconformity conforms to customary nursery usage for certification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.
- F. Pruning: All pruning of trees and shrubs, as directed by Landscape Architect, shall be executed by Landscape Contractor at no additional cost to the Owner.

Section 02900 - 03

3.2 INSTALLATION (cont.)

- F. Shrub and tree pits shall be no less than two (2') feet, twenty-four (24") inches wider than the ball diameter of each ball and six (6") inches deeper than the vertical dimension. Remove and backfill from site all rocks or stones over one (1") inches in diameter. Plants should be thoroughly watered before removing containers.
- G. Dig a wide, rough sided hole exactly the same depth as the height of the ball. Cut down the sides of the hole with the ground. The sides of the hole should be rough and jagged, never sloped or glazed.
- H. Percolation Test: Fill the hole with water. If the water level does not percolate within 24 hours, the tree needs to be moved to another location or have other hole drainage added.
- I. Backfill only with 6 parts existing soil or sandy loam and 1 part bed preparation. When hole is dug in solid rock, topsoil from the same area should not be used. Carefully settle by watering to prevent air pockets. Remove the burlap from the top 1/3 of the ball, as well as all nylon, plastic string and wire mesh. Container grass will usually be pot bound. If so follow standard nursery practice of root scoring.
- J. Do not wrap trees.
- K. Do not over prune.
- L. Match the top of the ball. Do not plant grass all the way to the trunk of the tree. Leave the grass above the top of the ball unplanted and mulch with at least two (2") inches of specified mulch.
- M. All plant beds and trees to be matched with a minimum settled thickness of two (2") inches over the entire bed or pit.
- N. Obstruction below ground: In the event rock or underground construction work or obstructions are encountered in any part of excavation work to be done under this section, alternate locations may be selected by the Owner. Where locations cannot be changed, the obstructions shall be removed to a depth of not less than three (3") feet below grade and no less than six (6") inches below bottom of ball when plant is grossly set at the required grade. The work of this section shall include the removal from the site of such rock or underground obstructions encountered at the cost of the Landscape Contractor.

Section 02900 - 07

2.2 SOIL PREPARATION MATERIALS

A. Sandy Loam:

1. Fines: fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing large pieces of organic matter shall be rejected.
2. Physical properties as follows:
 - Capillary water: 1.27 percent
 - Field capacity: 1.27 percent
 - Shrinkage: 12-25 percent
 - Sand: less than 22 percent
3. Organic matter shall be 3%-10% of total dry weight.
4. If required, provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.

B. Miscellaneous Materials

- A. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.
- B. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.
- C. Premium Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas, Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal.
- D. Organic Material Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of coarse and fine textured material.
- E. Organic Fertilizer: Fertilizer, Sustane, or Green Sense or equal as recommended for required application. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.
- F. Commercial Fertilizer: 10-10-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic nitrogen (SCU or UR) with a minimum 6% sulfur and 4% iron, plus micronutrients.
- G. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

Section 02900 - 04

3.2 INSTALLATION (cont.)

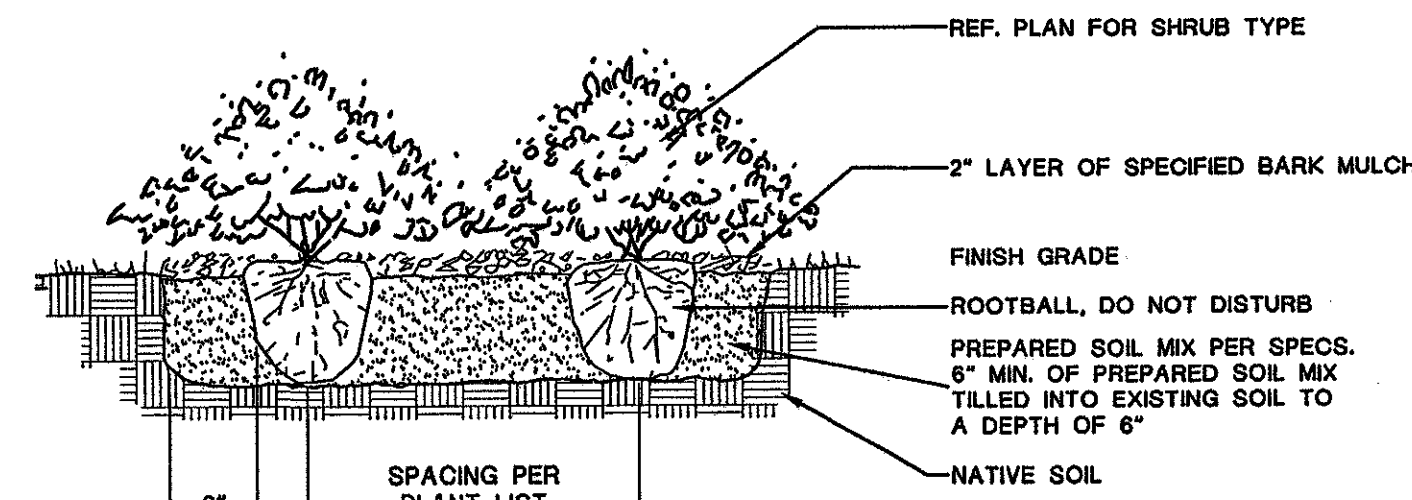
- D. Trees and large shrubs shall be staked as site conditions require. Position stakes to secure tree against seasonal prevailing winds.
- P. Pruning and Mulching: Each area shall be graded in accordance with standard horticultural practice to preserve the natural character of the plant and in the manner fitting its use in the landscape design.
 1. Dead wood or suckers and broken or badly bruised branches shall be removed.
 2. Pruning shall be done with clean sharp tools.
 3. Top of curbing shall be 1/2" maximum higher than existing grade.
 4. Stakes are to be installed on the planting bed side of the curbing, as opposed to the grass side.
 5. Do not install steel edging along sidewalks.
 6. Cut steel edging at 45 degree angle where edging meets sidewalk.

Section 02900 - 08

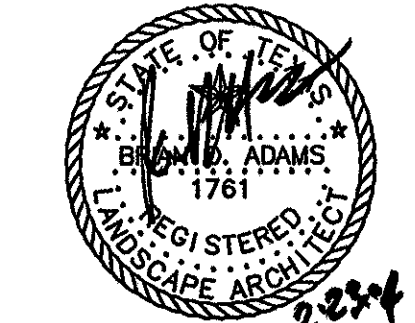
3.3 CLEANUP AND ACCEPTANCE

- A. Cleanup: During the work, the premises shall be kept neat and orderly at all times. Storage areas for all materials shall be so organized that they, too, are neat and orderly. All trash and debris shall be removed from the site as work progresses. Keep paved areas clean by sweeping or hosing at end of each days' work.

END OF SECTION



03 SHRUB / GROUNDCOVER DETAIL
NOT TO SCALE



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REV.	DATE	REMARKS
LANDSCAPE SPECS. AND DETAILS		
SOUTHRUST BANK		
BELT LINE - SURVEYOR VILLAGE ADDITION		
TOWN OF ADDISON, TEXAS		
LAWRENCE A. CATES & ASSOC., LLP		CONSULTING ENGINEERS
14200 MIDWAY ROAD, SUITE 122		DALLAS, TEXAS
DESIGN	DRAWN	DATE
M.S.	M.S.	02.23.04
SCALE	NOTES	FILE
1"=20'		
		NO.
		L1.02

BUBBLER PIPING CHART

- 1-5 BUBBLERS - 1/2" PIPE
- 6-10 BUBBLERS - 3/4" PIPE
- 11-20 BUBBLERS - 1" PIPE
- 21-30 BUBBLERS - 1 1/4" PIPE
- 31-40 BUBBLERS - 1 1/2" PIPE

IRRIGATION LEGEND

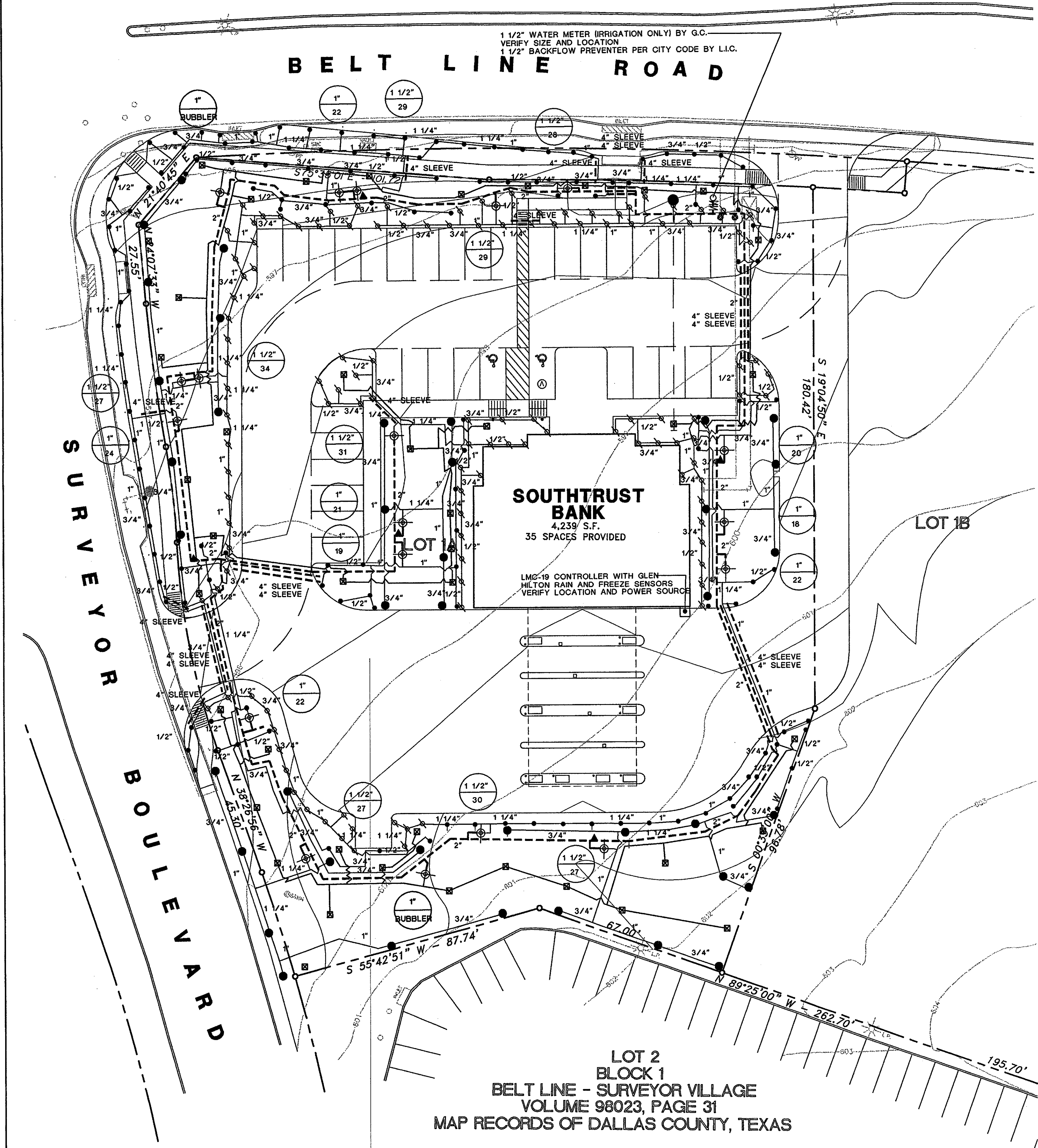
- WEATHERMATIC LX-4 POP-UP LAWN HEAD
- WEATHERMATIC LX-12 POP-UP SHRUB HEAD
- WEATHERMATIC TURBO ROTARY FC
- WEATHERMATIC TURBO ROTARY PC
- ⊠ 106.5 BUBBLER (2 PER TREE)
- ⊕ WEATHERMATIC 11000 SERIES ELECTRIC VALVE
- ⊕ WEATHERMATIC V075R QUICK COUPLER
- CONTROLLER, SIZE AS INDICATED
- ⊕ WATER METER, SIZE AS INDICATED
- ⊕ D.C.A., SIZE AS INDICATED
- PVC CLASS 200 LATERAL LINE
- - - PVC CLASS 200 MAINLINE
- - - PVC SCHEDULE 40 SLEEVING
- ⊕ VALVE SIZE GPM

SLEEVING NOTES

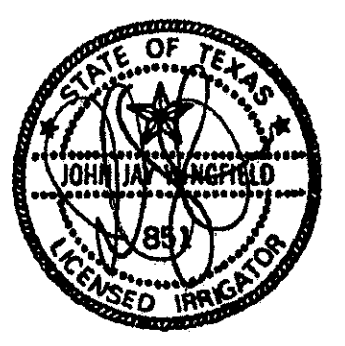
1. Contractor shall lay sleeves and conduits at twenty-four (24) inches below finish grade of the top of pavement.
2. Contractor shall extend sleeves one (1) foot beyond edge of all pavement.
3. Contractor shall cap pipe ends using PVC caps.
4. All sleeves shall be Schedule 40 PVC pipe.
5. Contractor shall furnish Owner and Irrigation Contractor with an "as-built" drawing showing all sleeve locations.

IRRIGATION NOTES

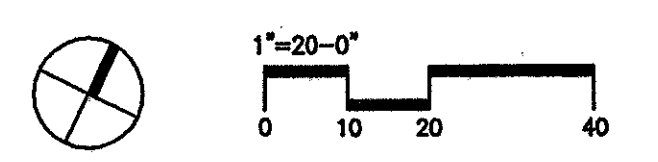
1. All sprinkler equipment numbers reference the Weathermatic equipment catalog unless otherwise indicated.
2. LAWN SPRAY HEADS are LX-4 installed as per detail shown.
3. SHRUB SPRAY HEADS are LX-12 installed as per detail shown.
4. ELECTRIC CONTROL VALVES shall be #11000 CR installed per detail shown. Size valves as shown on plan. Valves shall be installed in valve boxes large enough to permit manual operation, removal of solenoid and/or valve cover without any earth excavation.
5. QUICK COUPLING VALVES shall be #V075R installed per detail shown. Swing joints shall be constructed using 3/4" Schedule 80 elbows. Contractor shall supply owner with three (3) #C075 couplers and three (3) #10 swivel hose ends as part of this contract.
6. AUTOMATIC CONTROLLER shall be installed at location shown. Power (120V) shall be located in a junction box within five (5) feet of controller location by other trades.
7. All 24 volt valve wiring is to be UF 14 single conductor. All wire splices are to be permanent and waterproof.
8. SLEEVES shall be installed by General Contractor. Sleeve material shall be Schedule 40. Size as indicated on plan.
9. Ten days prior to start of construction, Landscape or Irrigation Contractor shall verify static water pressure. If static pressure is less than 50 P.S.I., do not work until notified to do so by Owner.
10. All main line and lateral piping to a minimum of 12 inches of cover. All piping under paving shall have a minimum of 18" of cover.
11. The Irrigation Contractor shall coordinate installation of the system with the Landscape Contractor so that all plant material will be watered in accordance with the intent of the plans and specifications.
12. The Irrigation Contractor shall select the proper arc and radius for each nozzle to insure 100% and proper coverage of all lawn areas and plant material. All nozzles shall be Weathermatic 5000 Series. All nozzles in parking lot islands and planting beds shall be low angle to minimize over spray on pavement surfaces. No water will be allowed to spray on building.



LOT 2
BLOCK 1
BELT LINE - SURVEYOR VILLAGE
VOLUME 98023, PAGE 31
MAP RECORDS OF DALLAS COUNTY, TEXAS



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REV.	DATE	REMARKS				
IRRIGATION PLAN						
SOUTHTRUST BANK						
BELT LINE - SURVEYOR VILLAGE ADDITION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 (972) 385-2272		CONSULTING ENGINEERS DALLAS, TEXAS				
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
J.J.W.	J.J.W.	02.23.04	1"=20'			L2.01

IRRIGATION SPECIFICATIONS

SECTION 02810

PART 1 - GENERAL

1.1 SCOPE

- A. Provide complete sprinkler installation as detailed and specified herein, including furnishing all labor, materials, and equipment for the proper installation. Work includes but is not limited to:
 1. Trenching and backfill.
 2. Automatic controlled system.
 3. Upon completion of installation, supply drawings showing details of construction including location of mainline piping, manual and automatic valves, electrical supply to valves, and specifically exact location of automatic valves.
- B. NOTE: All sleeves as shown on plans will be furnished by General Contractor. Meter and power source to be provided by General Contractor.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. See Irrigation Plans. See plans for controller, heads, and valves.
- B. Section 02810-Landscaping
- C. Section 02811-Underground Irrigation Sleeve and Utility Conduits

1.3 APPLICABLE STANDARDS

- A. American Standard for Testing and Materials (ASTM)-Latest edition.
 1. D2241 Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR)
 2. D2464 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Thread, Schedule 80
 3. D2465 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 80
 4. D2487 Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Socket Type, Schedule 80
 5. D2487 Flexible Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
 6. D2528 Flexible Poly (Vinyl Chloride) (PVC) Plastic Pipe
 7. D2528 Poly (Vinyl Chloride) (PVC) Solvent Weld Pipes
 8. D2528 Mating Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings

1.4 MAINTENANCE AND GUARANTEE

- A. Materials and workmanship shall be fully guaranteed for one (1) year after final acceptance.
- B. Provide maintenance of system, including raising and lowering of heads to compensate for lawn growth, cleaning and adjustment of heads, raising and lowering of lawn heads to compensate for shrub growth, for one (1) year after completion of installation.
- C. Guarantee is limited to repair and replacement of defective materials or workmanship, including repair of backfill settlement.

Section 02810 - 01

3.10 TESTING

- A. Sprinkler Main: Test sprinkler main only for a period of twelve (12) to fourteen (14) hours under normal pressure. If leaks occur, replace joint or joints and repeat test.
- B. Complete tests prior to backfilling. Sufficient backfill material may be placed in trenches between fittings to insure stability of line under pressure. In each case, leave fittings and couplings open to visual inspection for full period of test.

3.11 FINAL ADJUSTMENT

- A. After installation has been completed, make final adjustment of sprinkler system in preparation for Landscape Architect's final inspection. Completely flush system to remove debris from lines and turning on system. Check sprinklers for proper operation and proper alignment for direction of flow. Check each section of spray heads for operating pressure and balance to other sections by use of flow adjustment and top of each valve. Check nozzle for proper coverage. Prevailing wind conditions may indicate that each of angle of spray should be other than shown on drawings. In this case, change nozzles to provide correct coverage.

END OF SECTION

Section 02810 - 05

1.5 SUBMITTALS

- A. Procedure: Comply with Division I requirements.
- B. Product Data: Submit copies of equipment manufacturer's specifications and literature for approval.
- C. Project Record Documents
 1. Comply with Division I requirements.
 2. Locate by written dimension, routing of mainline piping, remote control valves and when manufacturing is complete, traceable work to major reproducible tracings. tracings will be provided by Architect.
 3. Submit completed tracings prior to final acceptance. Mark tracings "Record Prints".
 4. Provide three complete operation manuals and equipment brochures neatly bound in color.
 5. Provide three copies of keys to controller enclosure.
 6. Provide three copies of keys to controller enclosure.
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 49. Provide three copies of keys to controller enclosure.
 50. Provide three copies of keys to controller enclosure.
- D. Color Control Keys: Provide 3 color keys with color drains attached using brass reducer.
- E. Controller Keys: Provide two sets of keys to controller enclosure.
- F. Use of materials differing in quality, size, or performance from those specified will only be allowed upon written approval of Owner/Landscape Architect. The decision will be based on comparative ability of material or effort to perform fully as proposed of mechanic and general design considered to be possessed by firm specified.
- G. Bidder desiring to make a substitution for specified sprinkler shall submit manufacturer's catalog sheet showing full specification of each type sprinkler proposed as a substitute, including discharge in GPM maximum allowable operating pressure at sprinkler.
- H. Approval of substitute sprinkler shall not relieve Contractor of his responsibility to demonstrate that final installed sprinkler system will operate according to intent of originally designed and specified system.
- I. It is the responsibility of the Irrigation Contractor to demonstrate that final installed sprinkler system will operate according to intent of originally designed and specified system. If Irrigation Contractor notes any problems in head spacing or potential coverage, it is his responsibility to notify the Landscape Architect in writing, before proceeding with work. Irrigation Contractor guarantees 100% coverage of all areas to be irrigated.

1.6 TESTING

- A. Perform testing required with other trades, including earthwork, paving, and plumbing, to avoid unnecessary cutting, patching and boring.
- B. Water Pressure: Prior to starting construction, determine if static water pressure is as shown on drawings.

1.7 COORDINATION

- A. Coordinate installation with other trades, including earthwork, paving, and plumbing, to avoid unnecessary cutting, patching and boring.
- B. Coordinate to ensure that electrical power source is in place.
- C. Coordinate system installation with work specified in other sections and coordinate with landscape installer to ensure plant material is uniformly watered in accordance with intent shown on drawings.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Mainline: Piping from water source to operating valves. This portion of piping is subject to surge, being a closed portion of sprinkler system. Hydrant lines are considered a part of sprinkler main.
- B. Lateral Piping: Lateral piping is that portion of piping from operating valve to sprinkler heads. This portion of piping is not subject to surge, being an "open end" portion of sprinkler system.

Section 02810 - 02

2.2 POLY VINYL CHLORIDE PIPE (PVC PIPE)

- A. PVC pipe shall be manufactured in accordance with commercial standards noted herein.
- B. Marking and Identification: PVC pipe shall be continuously and permanently marked with the following information: manufacturer's name, pipe size, type of pipe, and material, SDR number, product standard number, and the NSF International Sanitation Foundation seal.
- C. PVC Pipe Fittings: Shall be of the same material as the PVC pipe specified and shall be compatible with PVC pipe furnished.

2.3 COPPER TUBING

- A. Hard, straight, lengths of domestic manufacture only. No copper tube of foreign extraction or any so-called irrigation tubing (thin wall) shall be used.

2.4 COPPER TUBE FITTINGS

- A. Cast brass or wrought copper, sweat-solder type.

2.5 WIRE

- A. Type UF with 4-64" insulation which is Underwriter's Laboratory approved for direct underground burial when used in a National Electric Code Class I Circuit (30 volts AC or less).

2.6 SCHEDULE 80 PVC NIPPLES

- A. Composed of Standard Schedule 40 PVC Fittings and PVC meeting noted standards. No degree of wire may be used. Nipples for 1812 heads and shrub risers to be nominal one-half (1/2") inch diameter by eight (8") inches long, where applicable.
- B. Polyethylene nipples six (6") inches long to be used on all 1804 and 1808 pop-up spray heads.

2.7 MATERIALS - See Irrigation Plan

- A. Sprinkler heads in lawn area as specified on plan.
- B. PVC Pipe: Class 200, SPR 21
- C. Copper Tubing (Cly Connections): Type "M"
- D. 24V Wire: Size 14, Type UF.
- E. Electric valves to be all plastic construction as indicated on plan.
- F. Refer to drawing for backflow prevention requirements and flow valve. Coordinate exact location with Landscape Architect.

PART 3 EXECUTION

3.1 INSTALLATION - GENERAL

- A. Staking: Before installation is started, place a stake where each sprinkler is to be located, in accordance with drawing. Staking shall be approved by Landscape Architect before proceeding.
- B. Excavation: Excavations are unsealed and include earth, loose rock, rock or any combination thereof, in wet or dry state. Backfill trenches with material that is suitable for compaction and contains no lumps, clots, rock, debris, etc. Special backfill specifications, if furnished take preference over this general specification.
- C. Backfill: Flood or hand-tamp to prevent after setting. Head rake trenches and adjoining area to leave grade is as good or better condition than before installation.
- D. Piping Layout: Piping layout is diagrammatic. Route piping around trees and shrubs in such a manner as to avoid damage to plantings. Do not dig within ball of newly planted trees or shrubs.

Section 02810 - 03

3.2 PIPE INSTALLATION

- A. Sprinkler Main: Install a four (4") inch minimum trench with a minimum of eighteen (18") inches of cover.
- B. Lateral Piping: Install a four (4") inch wide minimum trench deep enough to allow for installation of sprinkler heads and valves, but in no case, with less than twelve (12") inches of cover.
- C. Trenching: Remove lumber, rubbish, and large rocks from trenches. Provide firm, uniform bearing for entire length of each pipe line to prevent uneven settlement. Wedging or blocking of pipe will not be permitted. Remove foreign matter or dirt from inside of pipe before welding, and keep piping clean by approved means during and after laying of pipe.

3.3 PVC PIPE AND FITTING ASSEMBLY

- A. Solvents: Use only solvent recommended by manufacturer to make solvent-welded joints. Thoroughly clean pipe and fittings of dirt, dust and moisture before applying solvent.
- B. PVC to metal connection: Work metal connections first. Use a non-hardening pipe dope such as Permatex No. 2 on threaded PVC adapters into which pipe may be welded.

3.4 COPPER TUBING AND FITTING ASSEMBLY

- A. Clean pipe and fitting thoroughly and lightly sand pipe connections to remove residue from pipe. Attach fittings to tubing in an approved manner using 60-50 soft solid core solder.

3.5 SHRUB SPRAY HEADS (FIXED)

- A. Shrub Spray Heads: Supply in accordance with materials list, with nozzle in accordance with drawing. Drawings indicate size of nozzle and degree of arc. Determine correct degree of arc of nozzle in conditions warrant by area to be covered and by wind conditions that may affect coverage.
- B. Height: Install heads on PVC Schedule 80 risers sufficiently high to water under shrubs and plants, or as directed by the Landscape Architect.

3.6 POP-UP SPRAY HEADS

- A. Supply pop-up spray heads in accordance with materials list and plan. Attach sprinkler to lateral piping with a semi-flexible polyethylene nipple not less than three (3") inches or more than six (6") inches long.

3.7 VALVES

- A. Supply valves in accordance with materials list and sized according to drawings. Install valves in a level position in accordance with Manufacturer's Specifications. See plan for typical installation of electric valve, valve box.

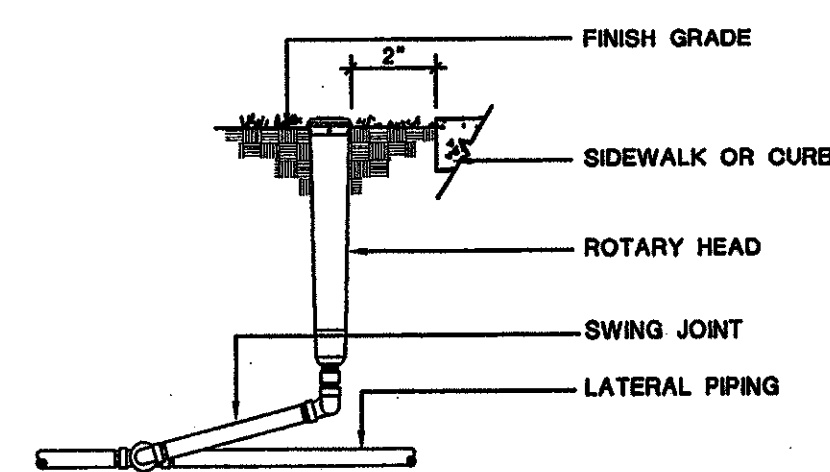
3.8 WIRING

- A. Supply wiring from the automatic sprinkler controls to the valves. No conduit will be required for UF wire unless otherwise noted on the plan. Wire shall be tucked under the piping.
- B. A separate wire is required from the control to each electric valve. A common neutral wire is also required from each control to each of the valves served by each particular control.
- C. Bundle multiple wires and tape them together at ten (10') foot intervals. Install ten (10') inch expansion coil at not more than one hundred (100') foot intervals. Make splice waterproof.

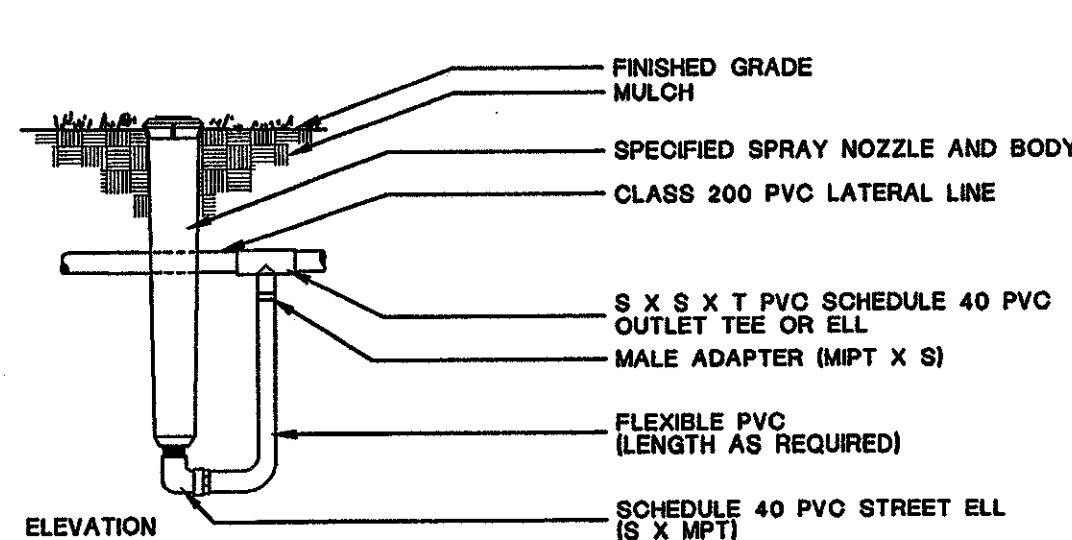
3.9 AUTOMATIC SPRINKLER CONTROLS

- A. Supply in accordance with Irrigation Plan. Install according to manufacturer's recommendations.

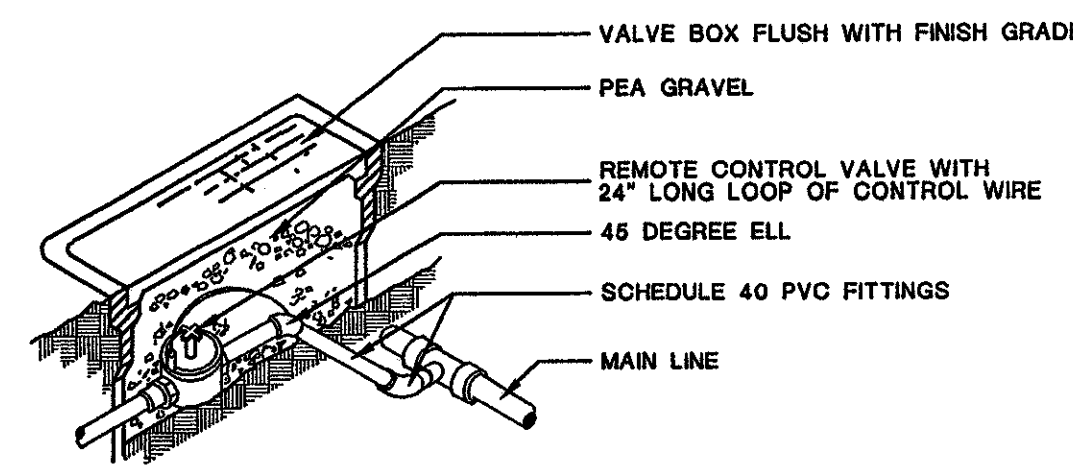
Section 02810 - 04



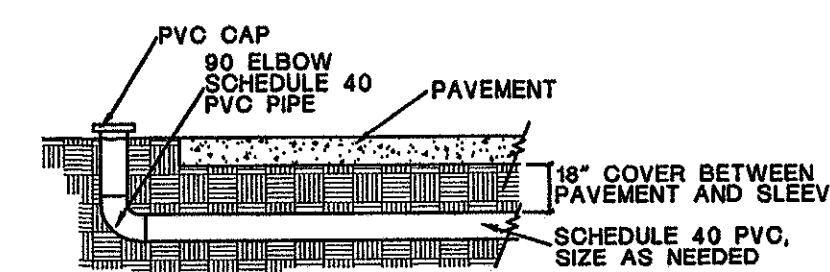
01 ROTARY HEAD NOT TO SCALE



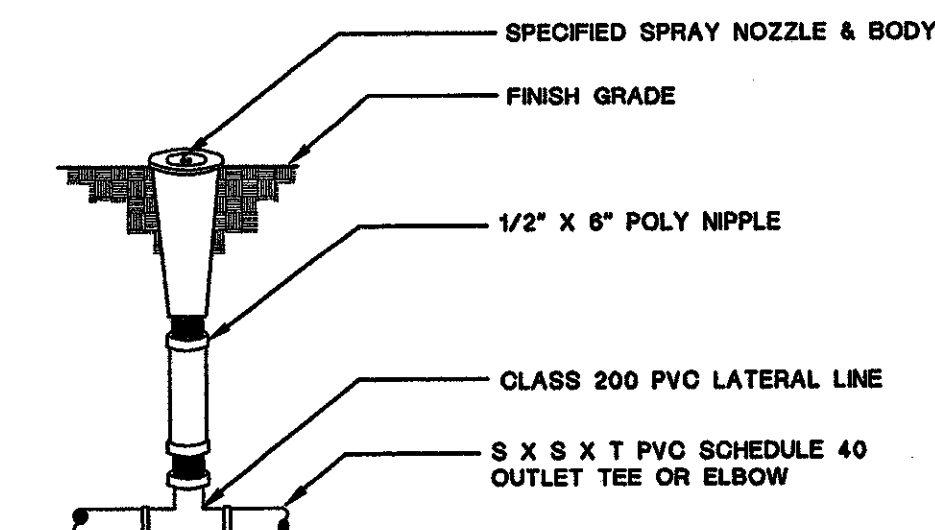
02 HIGH POP-UP SPRAY ASSEMBLY NOT TO SCALE



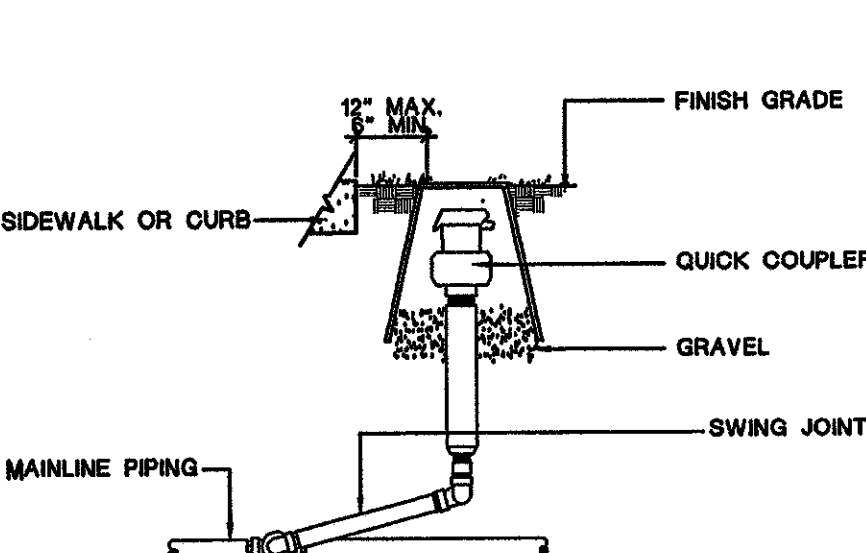
03 REMOTE CONTROL VALVE NOT TO SCALE



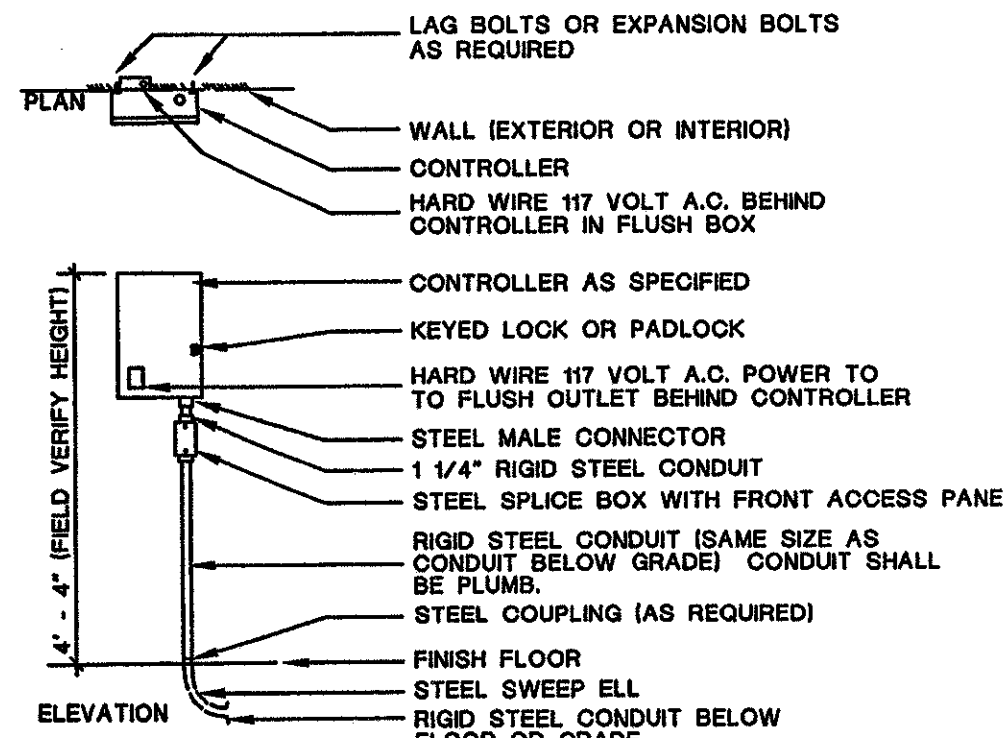
04 SLEEVE DETAIL NOT TO SCALE



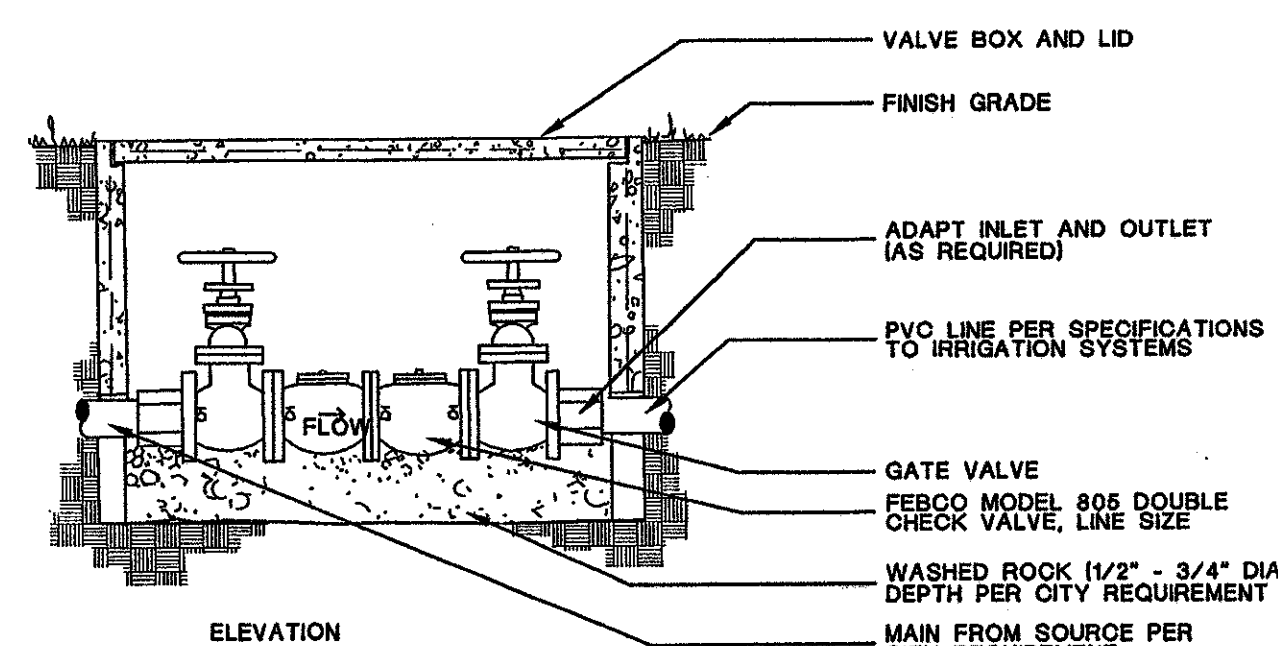
05 POP-UP LAWN SPRAY ASSEMBLY NOT TO SCALE



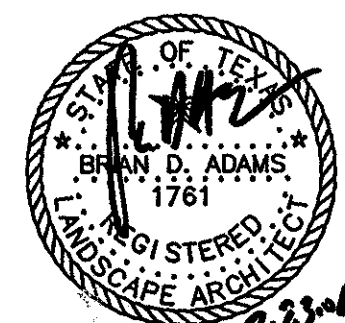
06 QUICK COUPLER NOT TO SCALE



07 WALL MOUNTED CONTROLLER NOT TO SCALE

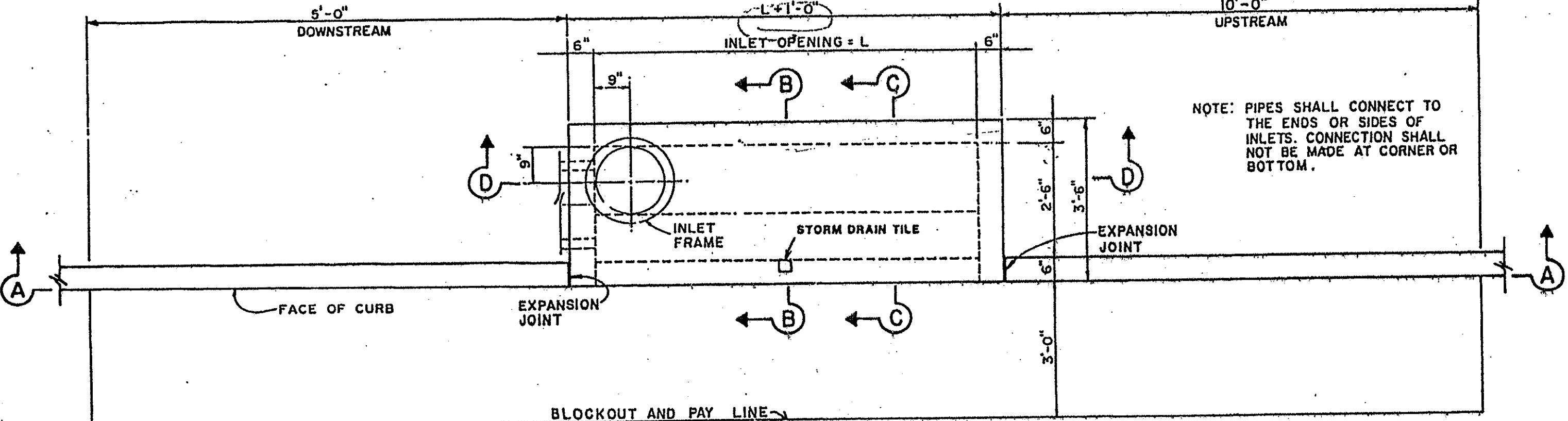
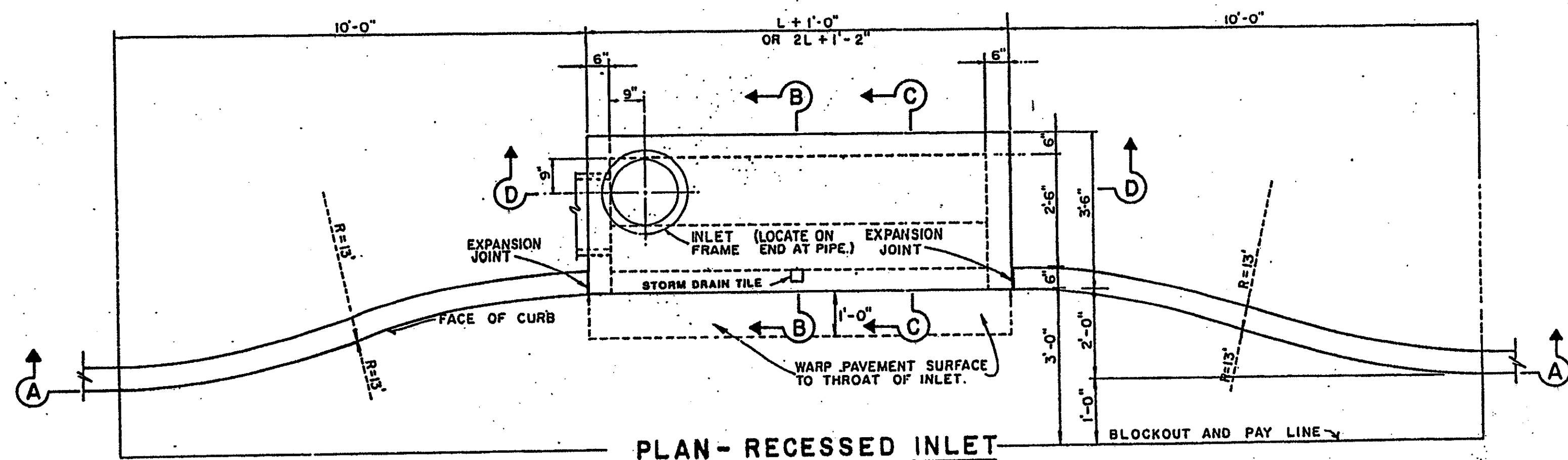


08 BACKFLOW PREVENTER NOT TO SCALE

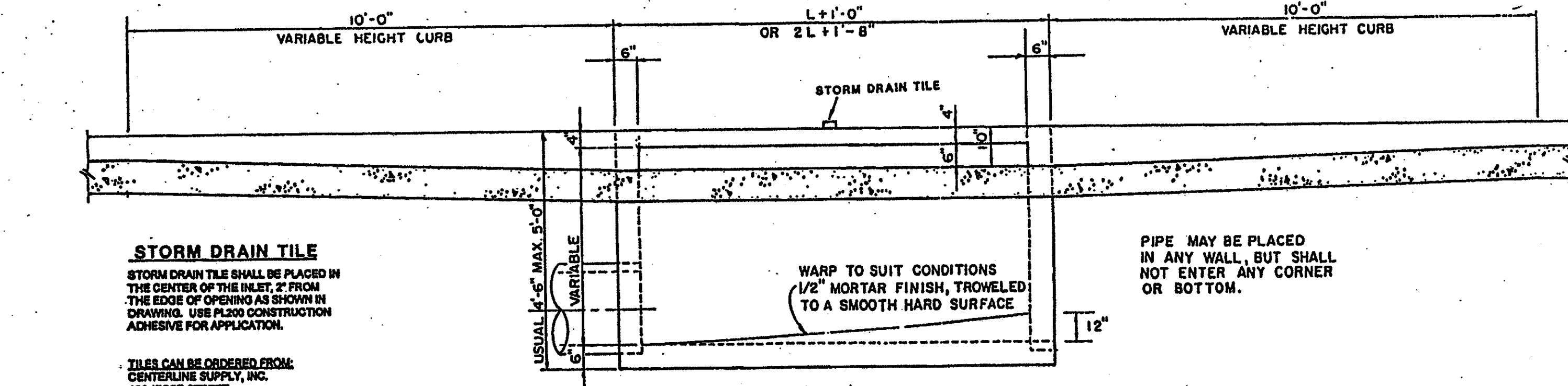


smr
landscape architects, inc.
1706 N. Collins Street
Dallas, Texas 75202
Tel 214.871.0563
Fax 214.871.0546
Email smr@smr-tx.com

REV.	DATE	REMARKS				
IRRIGATION SPECS. AND DETAILS						
SOUTHTRUST BANK						
BELT LINE - SURVEYOR VILLAGE ADDITION						
TOWN OF ADDISON, TEXAS						
LAWRENCE A. CATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 (972) 385-2272		CONSULTING ENGINEERS DALLAS, TEXAS				
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
M.S.	M.S.	02.23.04	1"=20'			L2.02



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

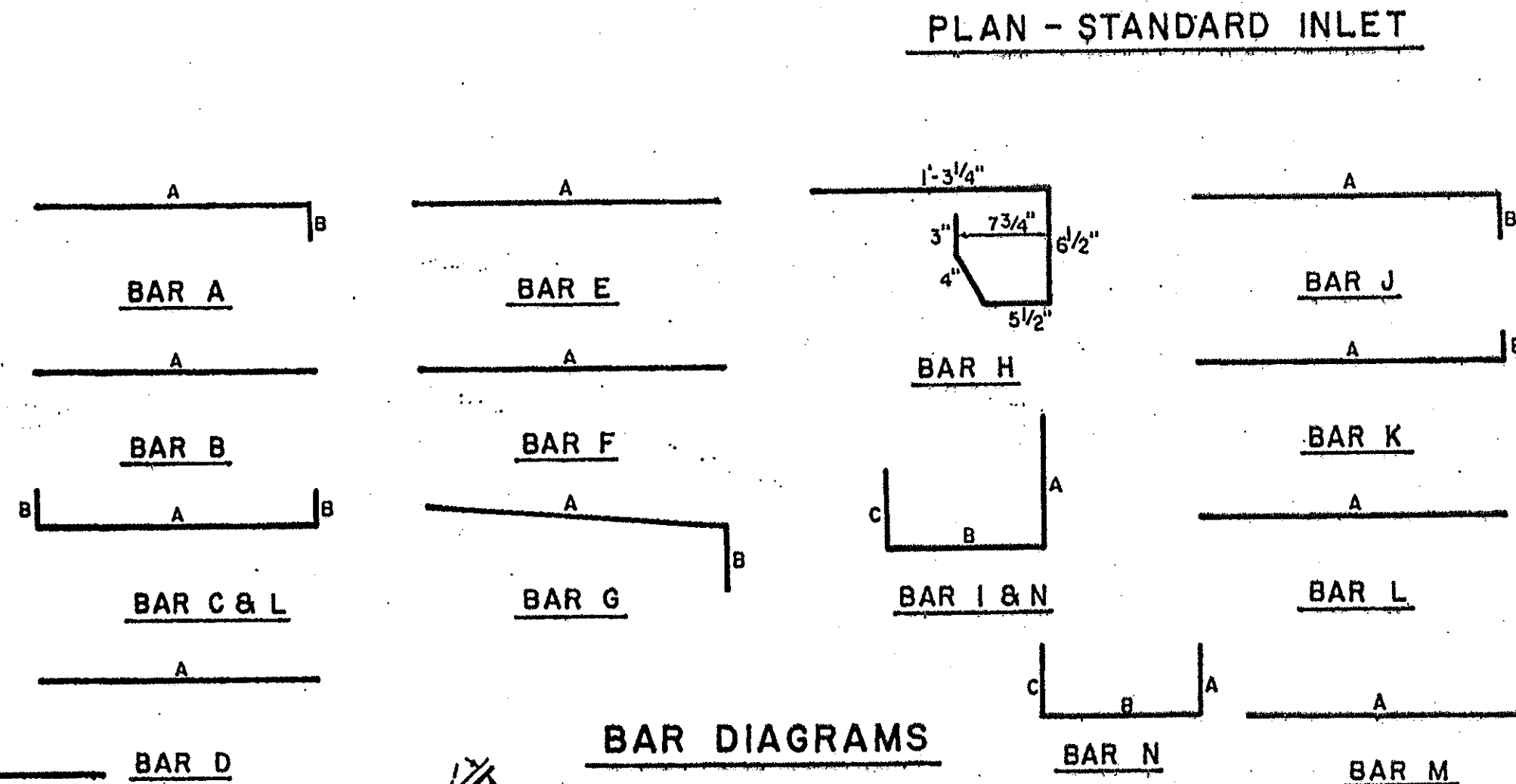


STORM DRAIN TILE
STORM DRAIN TILE SHALL BE PLACED IN THE CENTER OF THE INLET, 2" FROM THE EDGE OF OPENING AS SHOWN IN DRAWING. USE PL200 CONSTRUCTION ADHESIVE FOR APPLICATION.

THIS CAN BE ORDERED FROM:
CENTRAL SUPPLY, INC.
425 JESSE STREET
GRAND PRAIRIE, TX 75050-1141
1-800-331-1751 METRO: 214-447-4300
FAX: 214-441-1221

SECTION A-A-RECESSED AND STANDARD INLETS

4, 6, 8 AND 10 FOOT INLETS



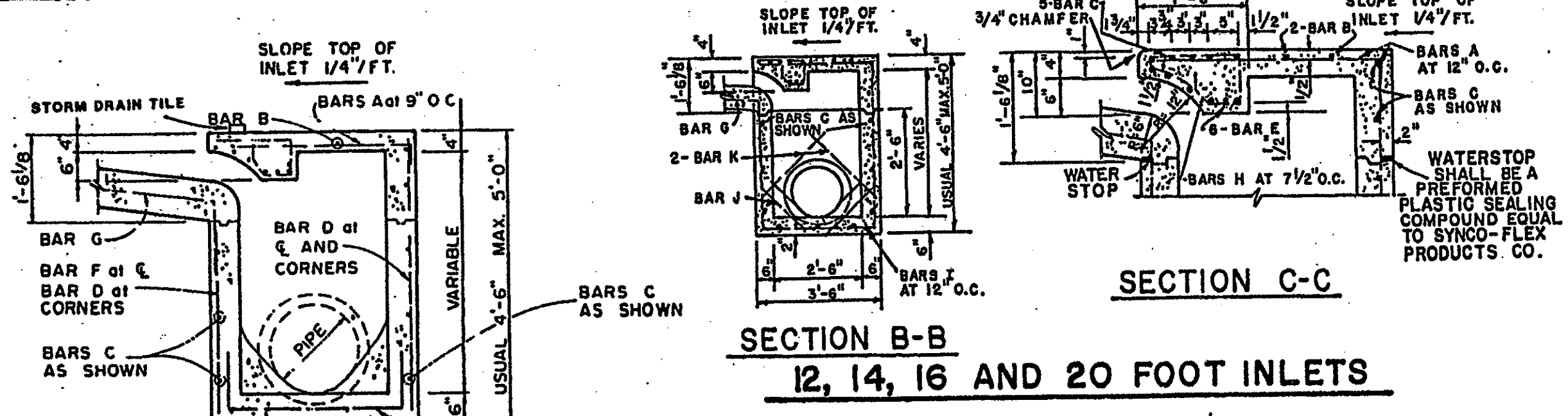
BAR DIAGRAMS

REINFORCING STEEL SCHEDULE

DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

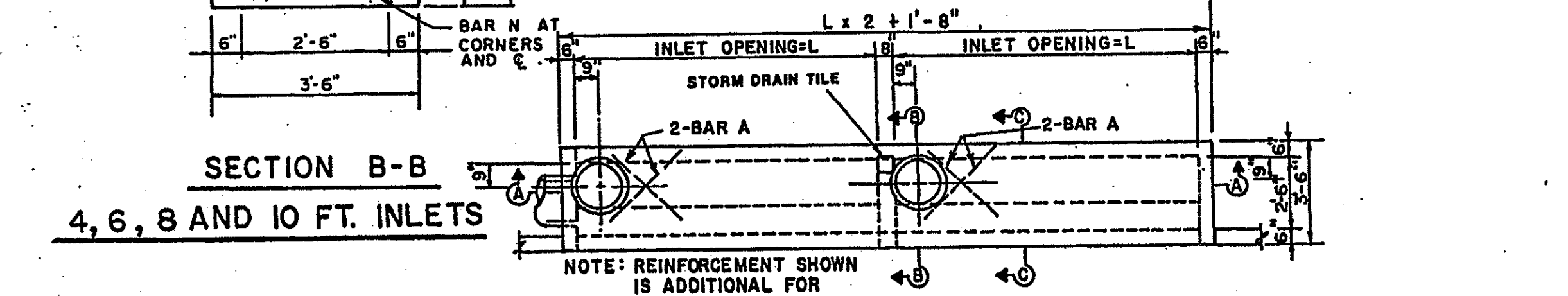
INLET LENGTH	BAR TYPE	BAR DIA. (1/8 IN.)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	
	B	3	1	2'-10"		
	C	4	15	4'-8"	0'-6"	
	D	4	8	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	3			
6	N	3	3	3'-2"	3'-2"	3'-2"
	A	3	9	3'-2"	0'-3"	
	B	3	1	4'-10"		
	C	4	15	6'-8"	0'-6"	
	D	4	5	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	3			
8	N	3	3	3'-2"	3'-2"	3'-2"
	A	3	12	3'-2"	0'-3"	
	B	3	1	6'-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	4			
10	N	3	3	3'-2"	3'-2"	3'-2"
	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"		

*SEE DIAGRAM FOR DIMENSIONS. 4', 6', 8' AND 10' INLETS



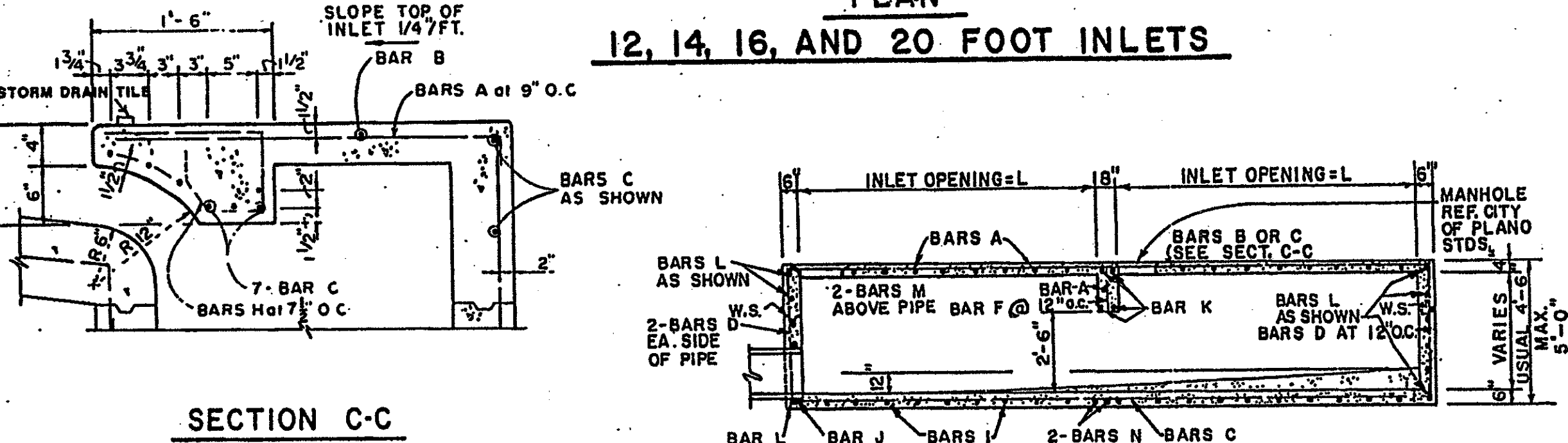
SECTION B-B
12, 14, 16 AND 20 FOOT INLETS

SECTION C-C



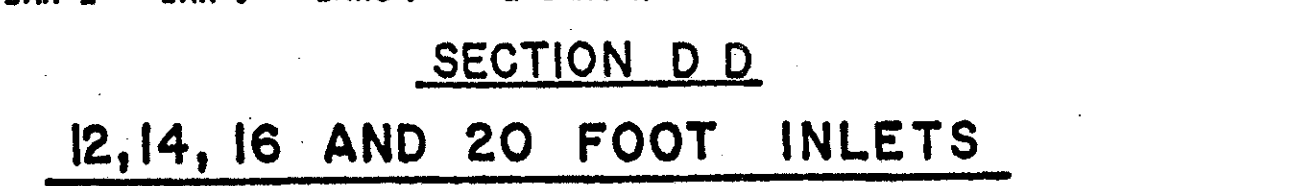
SECTION B-B
4, 6, 8 AND 10 FT. INLETS

PLAN
12, 14, 16, AND 20 FOOT INLETS



SECTION C-C

4, 6, 8 AND 10 FOOT INLETS



SECTION D-D

12, 14, 16 AND 20 FOOT INLETS

REINFORCING STEEL SCHEDULE

DOUBLE INLETS

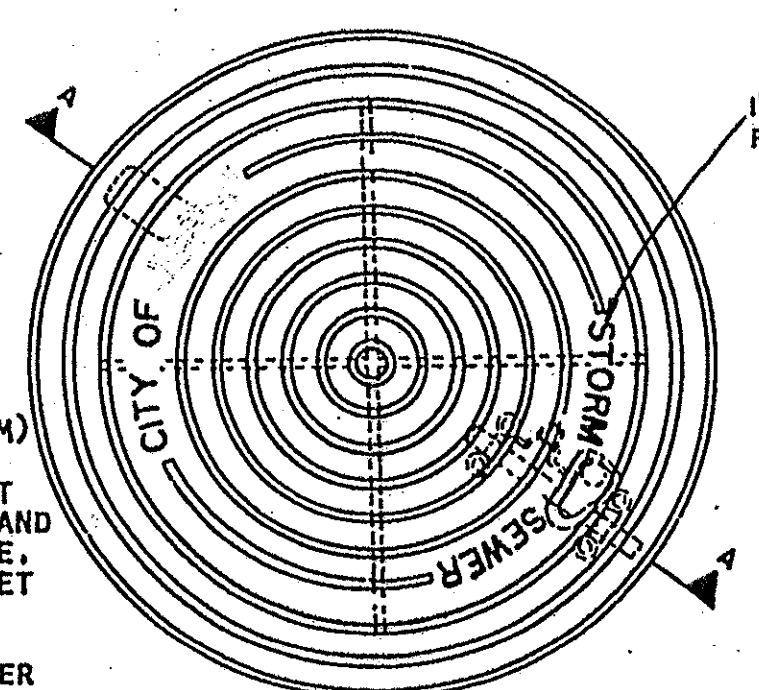
DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS

INLET LENGTH	BAR TYPE	BAR DIA. (1/8 IN.)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
6 FT.	A	3	15	3'-2"	0'-6"	
	B	3	2	11'-6"		
	C	4	15	13'-4"	0'-6"	
	D	4	9	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	12	2'-0"		
	J	3	1	4'-8"	3'-2"	3'-2"
	K	3	5	3'-2"	0'-6"	
	L	4	11	3'-2"	0'-6"	
	M	4	2	3'-0"		
	N	4	2	4'-8"	3'-2"	4'-8"
7 FT.	A	3	17	3'-2"	0'-6"	
	B	3	2	13'-6"		
	C	4	16	15'-4"	0'-6"	
	D	4	9	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	32			
	J	3	14	4'-8"	3'-2"	3'-2"
	K	3	6	3'-2"	0'-6"	
	L	4	11	3'-2"	0'-6"	
	M	4	2	3'-0"		
	N	4	2	4'-8"	3'-2"	4'-8"
8 FT.	A	3	19	3'-2"	0'-6"	
	B	3	2	15'-6"		
	C	4	18	17'-4"	0'-6"	
	D	4	9	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	28			
	J	3	16	4'-8"	3'-2"	3'-2"
	K	3	6	3'-2"	0'-6"	
	L	4	11	3'-2"	0'-6"	
	M	4	2	3'-0"		
	N	4	2	4'-8"	3'-2"	4'-8"
10 FT.	A	3	23	3'-2"	0'-6"	
	B	3	2	19'-6"		
	C	4	16	21'-4"	0'-6"	
	D	4	9	4'-8"		
	F	4	1	3'-2"		
	G	3	5	2'-0"	1'-3"	
	H	3	32			
	J	3	15	4'-8"	3'-2"	3'-2"
	K	3	6	3'-2"	0'-6"	
	L	4	11	3'-2"	0'-6"	
	M	4	2	3'-0"		
	N	4	2	4'-8"	3'-2"	4'-8"

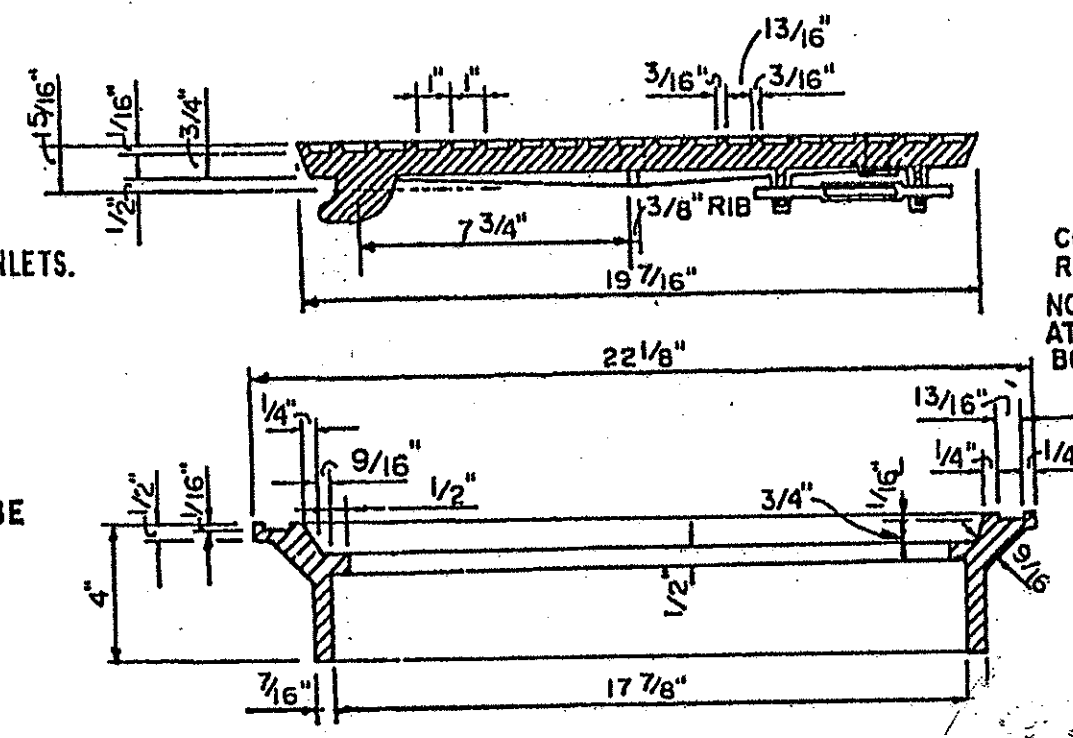
*SEE DIAGRAM FOR DIMENSIONS
**FIELD CUT AS REQ'D TO ACCOMMODATE DRAIN PIPE.
12', 14', 16' AND 20' INLETS

NOTES FOR PRECAST INLET

- (1) THE FLOOR OF THE EXCAVATION MUST PROVIDE A FIRM, LEVEL BED FOR THE BASE SECTION TO REST UPON.
- (2) A MINIMUM OF 6 INCHES OF 1" DIAMETER (MAXIMUM) ROCK OR GRAVEL SHALL BE USED TO PREPARE THE BEDDING TO FINAL GRADE OR IN LIEU OF THIS, AT LEAST 6 INCHES OF 2-SACK CEMENT STABILIZED SAND SHALL BE USED TO PREPARE THE BEDDING TO GRADE. CEMENT STABILIZED-SAND SHALL BE ALLOWED TO SET BY KEEPING HOLE PUMPED DRY.
- (3) AFTER CASTING HAS BEEN INSTALLED ON THE PROPER BEDDING, THE BACKFILL MATERIAL, WHICH IS FREE FLOWING AND CLEAR OF ROCKS, IN EXCESS OF 4" DIAMETER AND OTHER LUMPS WHICH WOULD PROHIBIT PROPER COMPACTION, SHALL BE COMMENCED IN LIFTS OF NO MORE THAN 18". THE MATERIAL USED FOR BACKFILL SHOULD BE OF A TYPE SUITABLE TO OBTAIN THE DENSITY REQUIREMENTS FOR THE SPECIFIC JOB.
- (4) PRECAST INLETS MUST BE APPROVED BY CITY ENGINEER.
- (5) CONCRETE TO BE MIN. 4200 PSI.
- (6) LOCKING DEVICE IS REQUIRED ON ALL STORM SEWER LIDS.
- (7) "NO DUMPING" WARNING PLAQUE TO BE INSTALLED ON ALL STANDARD AND RECESSED INLETS.

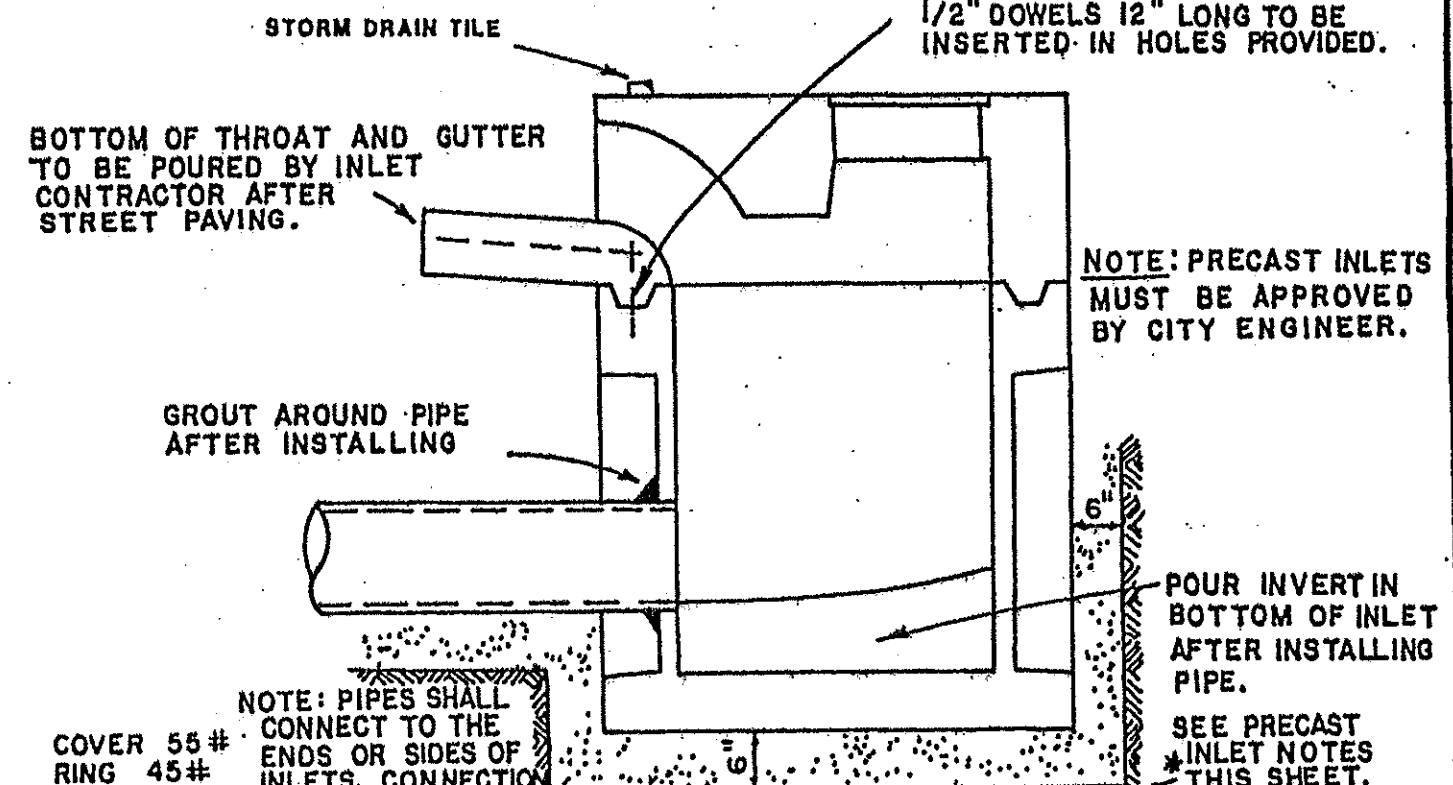


PLAN OF FRAME



SECTION OF FRAME AND COVER

INLET FRAME AND COVER

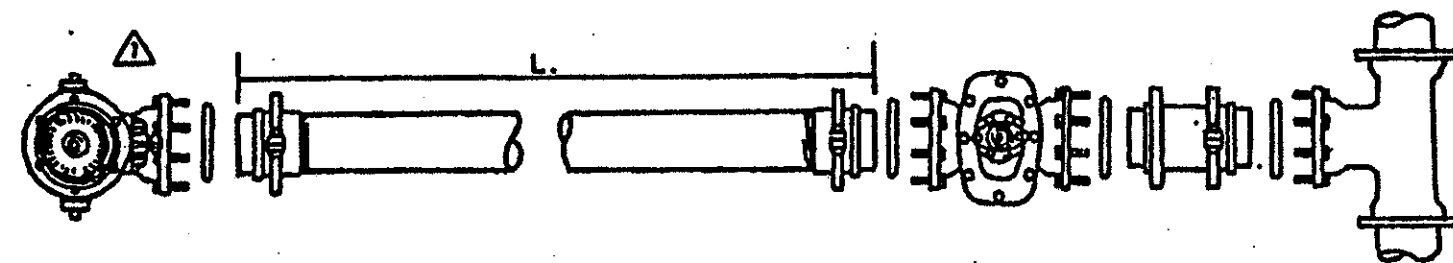
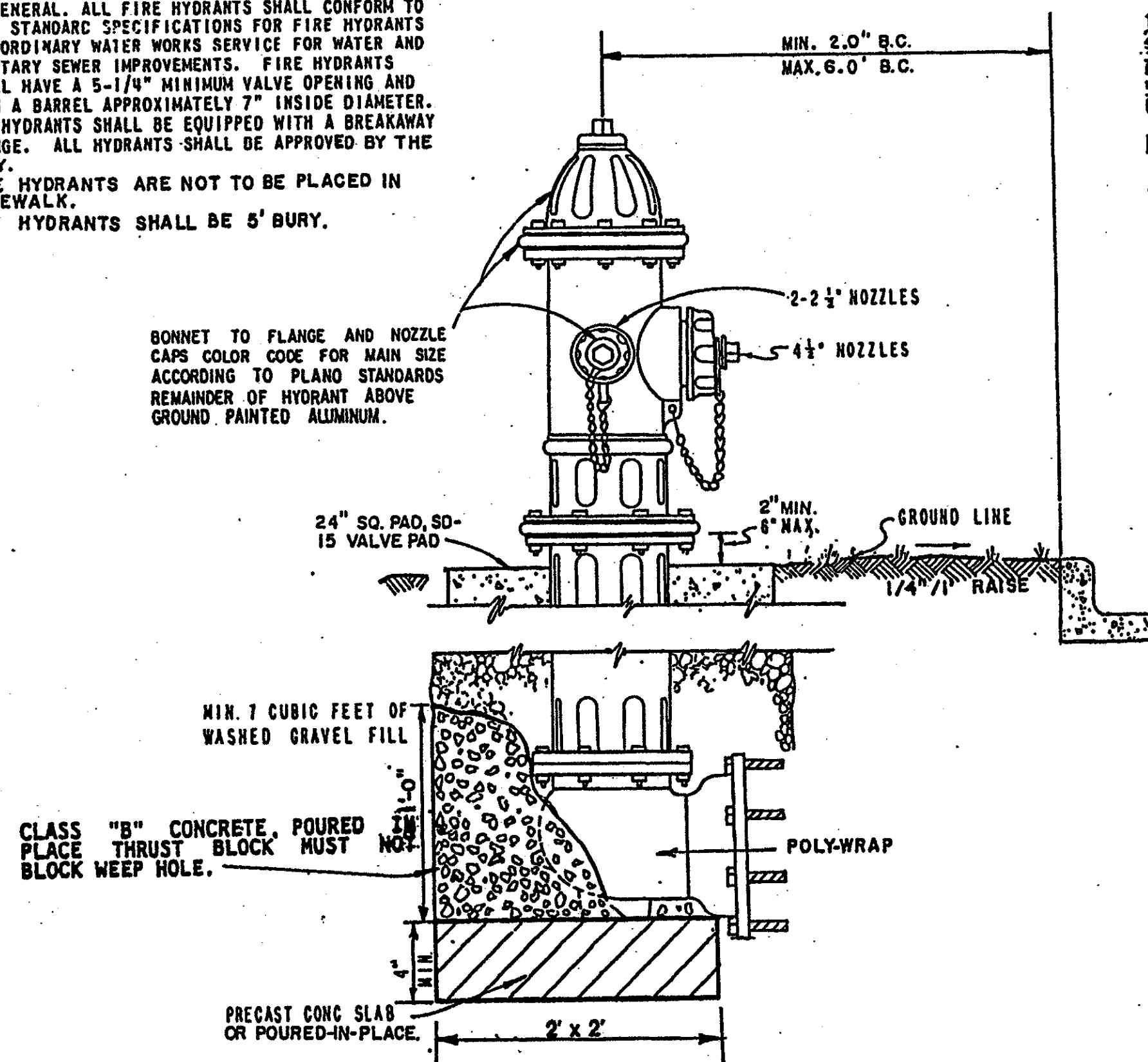


INSTALLATION DRAWING FOR 5 & 10\"/>

NO.	NCT	STANDARD SPECIFICATIONS	REVISION	BY	DATE
PUBLIC WORKS DEPARTMENT OF ENGINEERING					
STANDARD CONSTRUCTION DETAILS STORM DRAINAGE					
CURB INLETS					
APPROVED					
DATE: JULY, 1996					SHEET SD-1

APPROVED FIRE HYDRANTS, VALVES, ETC.

NOTE: IN GENERAL, ALL FIRE HYDRANTS SHALL CONFORM TO ANNA STANDARD SPECIFICATIONS FOR FIRE HYDRANTS FOR ORDINARY WATER WORKS SERVICE FOR WATER AND SANITARY SEWER IMPROVEMENTS. FIRE HYDRANTS SHALL HAVE A 5-1/4" MINIMUM VALVE OPENING AND WITH A BARREL APPROXIMATELY 7" INSIDE DIAMETER. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL HYDRANTS SHALL BE APPROVED BY THE CITY.
FIRE HYDRANTS ARE NOT TO BE PLACED IN SIDEWALK.
FIRE HYDRANTS SHALL BE 5' BURY.



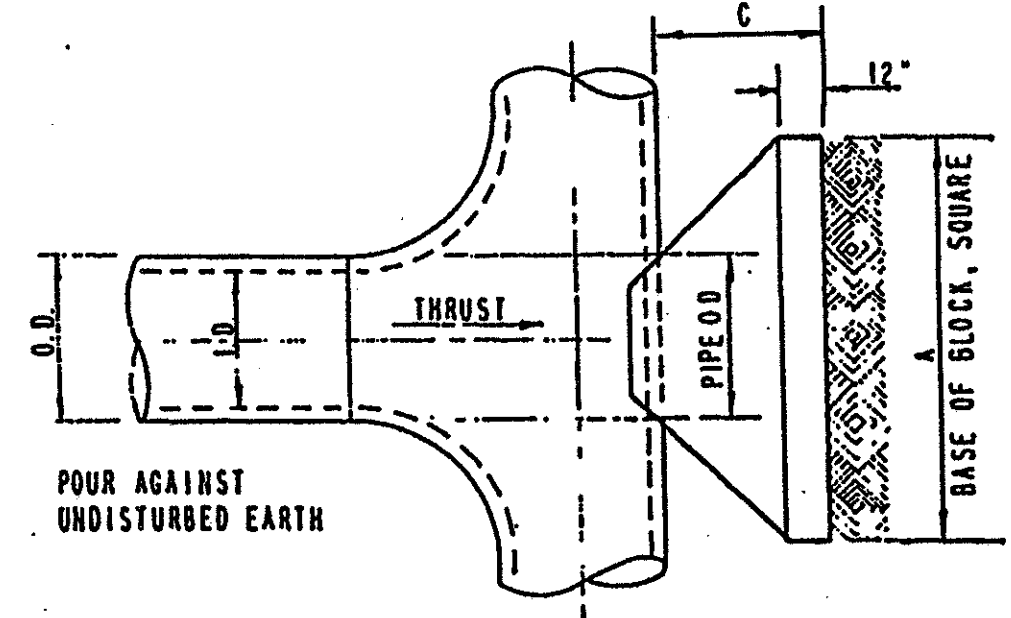
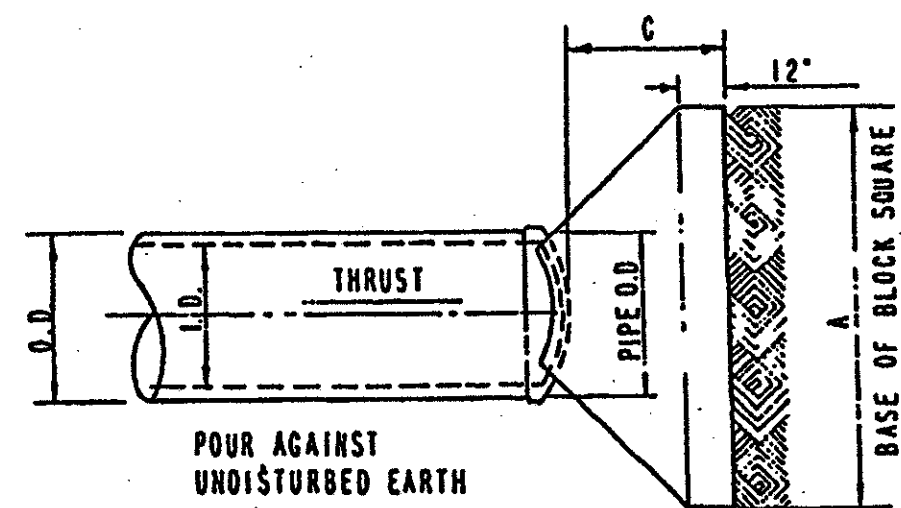
TYPICAL FIRE HYDRANT INSTALLATION

THRUST IN TONS FOR VERTICAL OR HORIZONTAL BENDS

I. D. IN INCHES	Δ							
	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

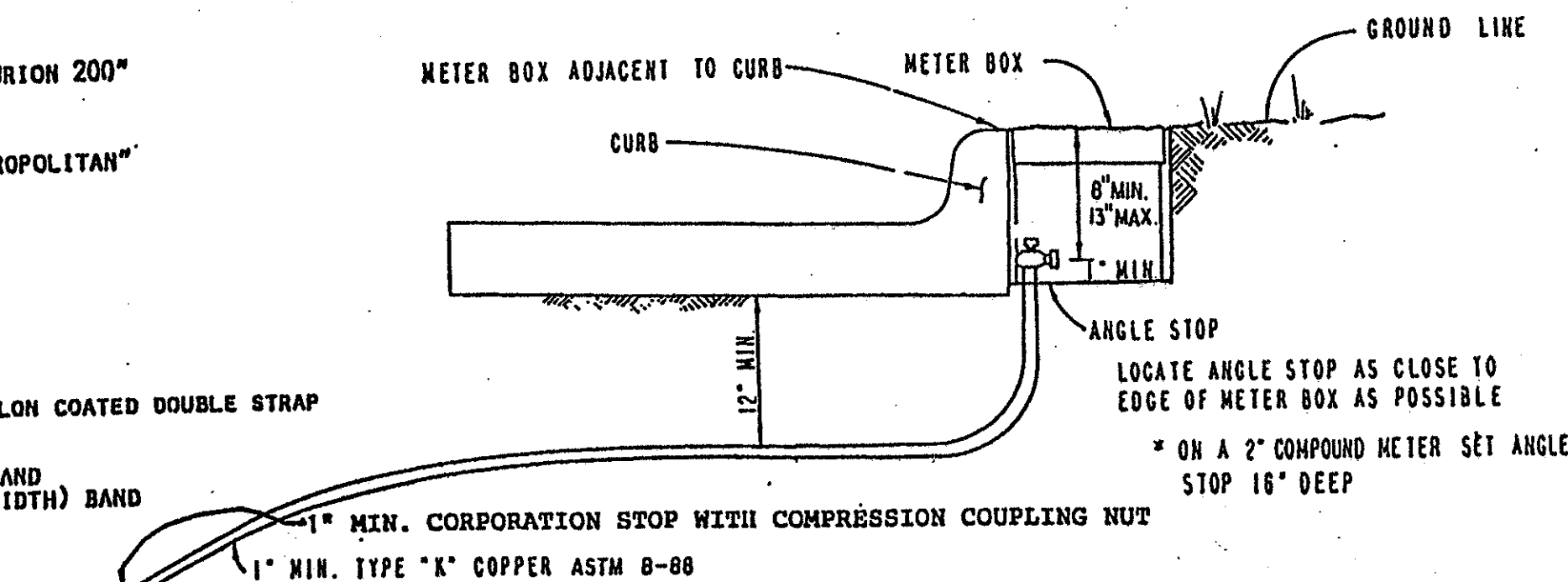
I. D. UNIT	A FT.	C FT.	THRUST TONS
12"			
14"			
16"	3.87	1.57	15.08
18"	4.37	1.77	19.09
20"	4.86	1.97	23.56
24"	5.82	2.36	33.93
30"	7.28	2.95	53.01



TYPICAL PLUG & TEE THRUST BLOCKS

- VALVES-RSGV
- MUELLER
 - AMERICAN DARLING
 - WATEROUS "SERIES 500"
 - KENNEDY
 - U.S. PIPE & FOUNDRY "METRO-SEAL"
 - CLOW
- FIRE HYDRANTS
- MUELLER "CENTURION" & "SUPER CENTURION 200"
 - AMERICAN DARLING "8-84B"
 - WATEROUS "PACER MOD. NO. 67"
 - KENNEDY K 81A "GUARDIAN"
 - UNITED STATES PIPE & FOUNDRY "METROPOLITAN"
 - CLOW "MEDALLION"
- TAPPING SLEEVE
- MUELLER TRAVERSE
 - TYLER TRAVERSE
 - AMERICAN DARLING MJ SPLIT
- TAPPING SADDLES
- ROCKWELL "317" STAINLESS STEEL NYLON COATED DOUBLE STRAP
 - ROCKWELL BRONZE DOUBLE STRAP
 - MUELLER BRONZE DOUBLE STRAP
 - FORD 202S BRASS DOUBLE (WIDTH) BAND
 - FORD FC202 EPOXY COATED DOUBLE (WIDTH) BAND

NOTE: DOMESTIC WATER SERVICES SHALL NOT BE CONNECTED TO FIRE HYDRANT LINES.



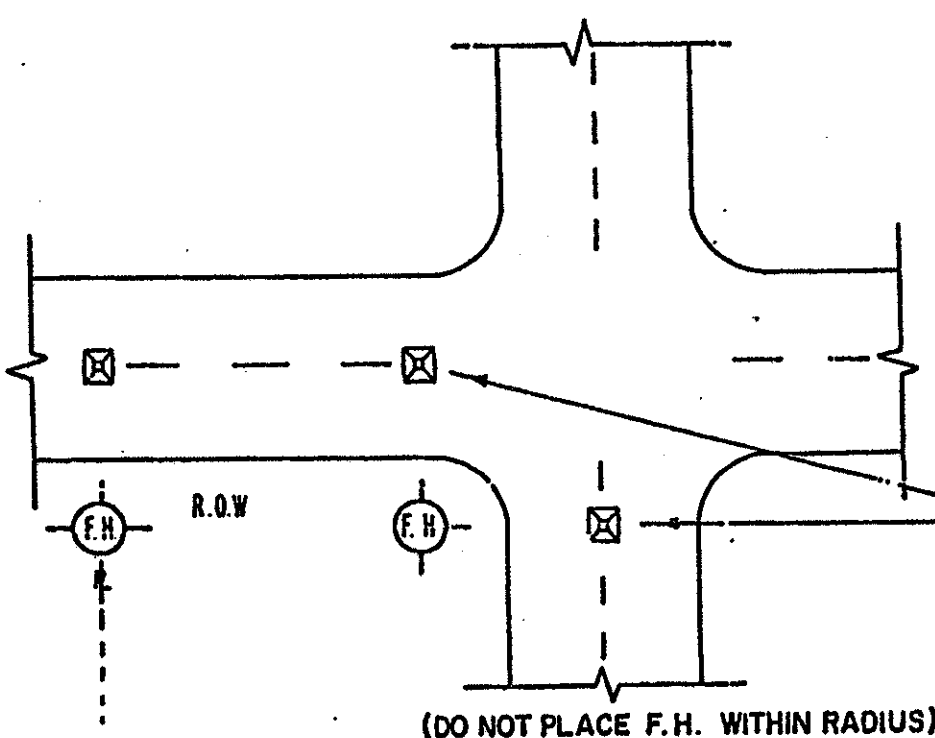
FOR 1" OR SMALLER METER

METER BOX SHALL BE CORRUGATED METAL, 18" DIAMETER, 14" 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 OR TYLER RING #200-R & WESTERN IRON WORKS #FD W1W 92/20. WATER METER SHALL BE PLACED IN CENTER OF LOT WITH SANITARY SEWER HOUSE CONNECTION LOCATED 10 FEET DOWN STREAM. ALL TAPS SHALL BE MADE AT 45° ANGLE TO & OF PIPE. MINIMUM TAP SIZE TO BE 1-INCH-PER 6.7, 3"(1)(1)(B)(2)(3) OR (5).

TYPICAL SERVICE CONNECTION WITH METER BOX

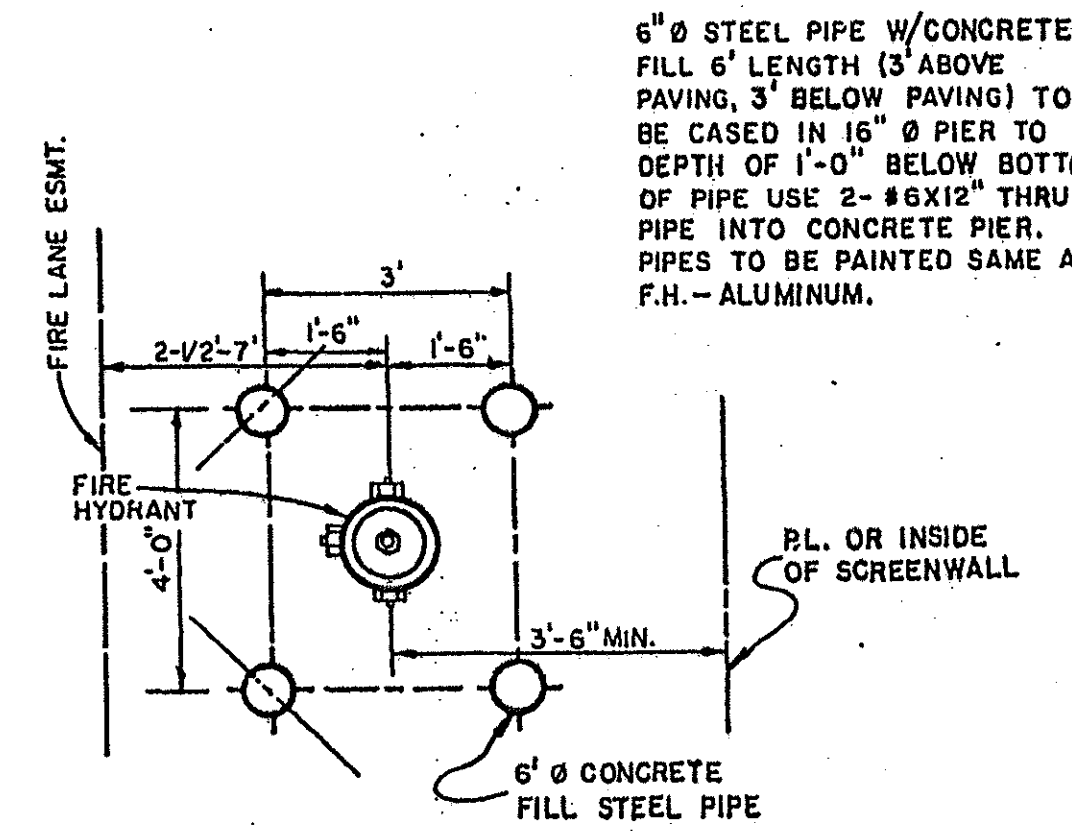
TYPE K COPPER SERVICE PIPE SOFT ANNEALED	DOUBLE STRAP BRONZE SERVICE SADDLE WITH C.C. THREADS	BASS & HAYS SLOTTED METER BOX
1 INCH	1 INCH	344S
1 1/2 INCH	1 1/2 INCH	554S
2 INCH	2 INCH	554S

ALL MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS. REFER TO SD-18 FOR SADDLE SPECIFICATION.



TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION (NO SCALE)

A BLUE STIMONSITE 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.



FIRE HYDRANT GUARD POST DETAIL SCALE: N.T.S.

NOTE: FOR USE ONLY WHERE CURBS ARE NOT POSSIBLE

GENERAL NOTES:

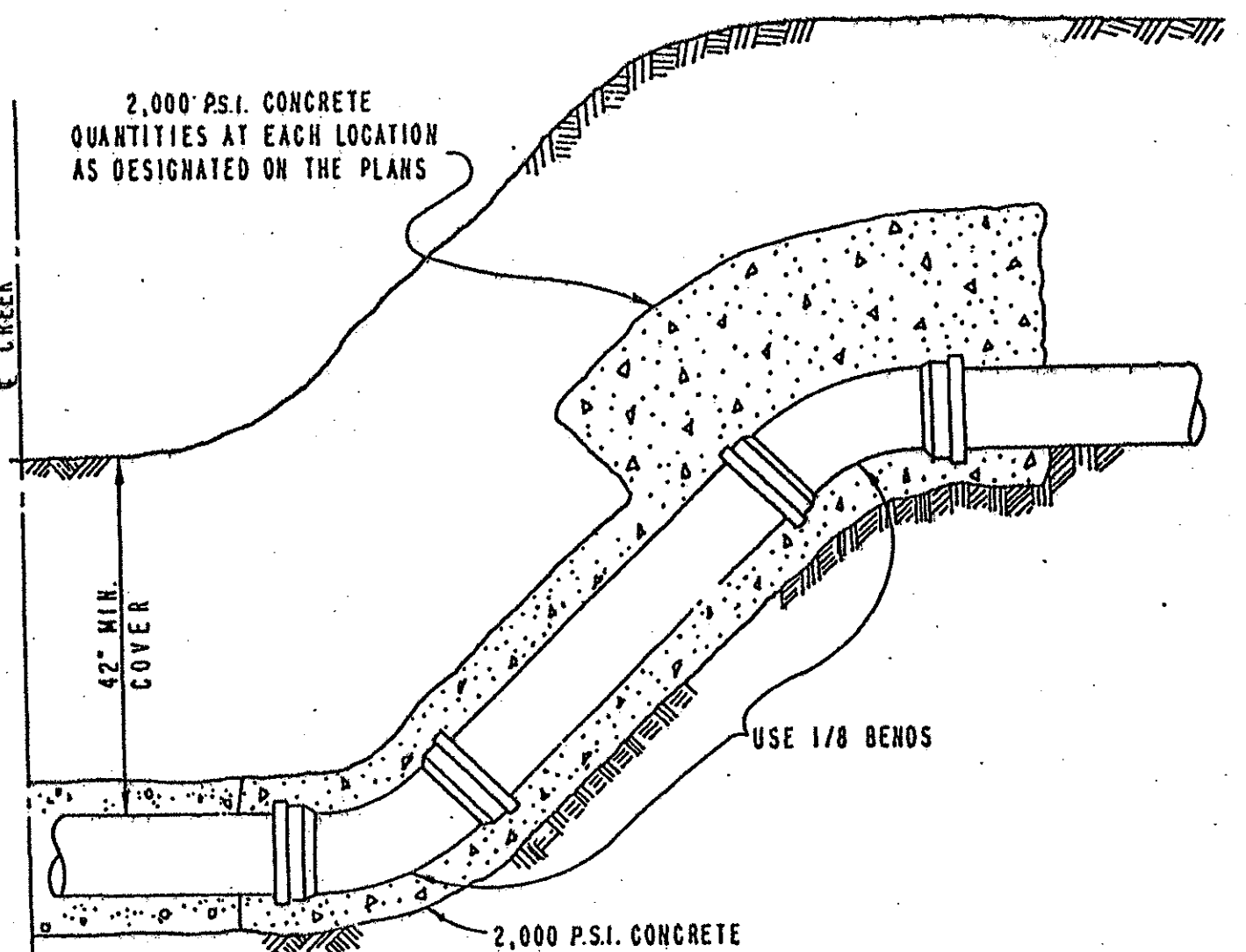
ALL CALCULATIONS ARE BASED ON TOTAL INTERNAL PRESSURE OF 150 P.S.I.

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 P.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 MINIMUM 2000 P.S.I. 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.

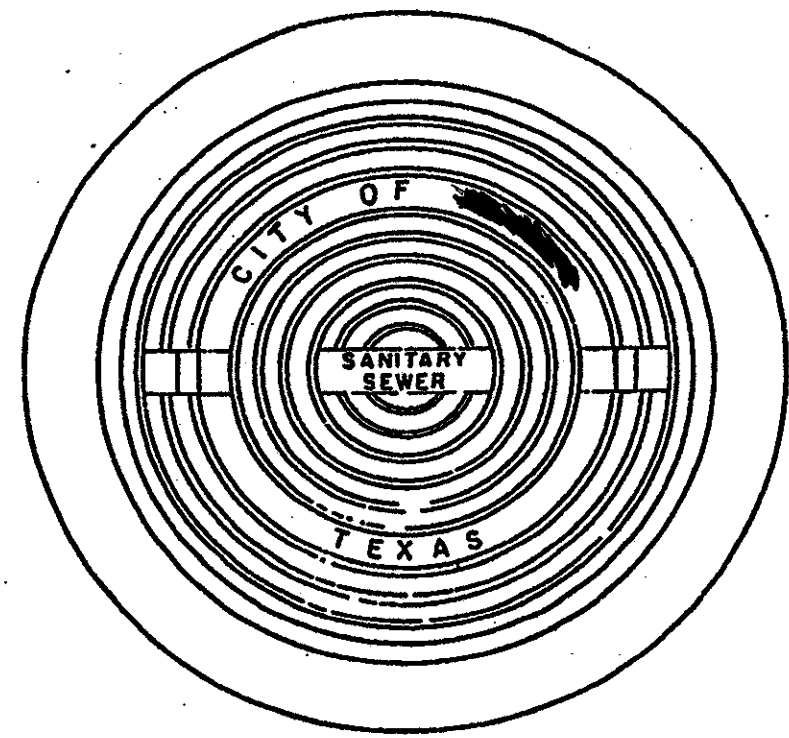
POLYPIG SHALL BE PULLED THROUGH WATER LINES BEFORE LINES ARE ACCEPTED BY CITY.

WATER METER BOXES SHALL BE PROTECTED BY A 6" CURB OR BALLARDS WHEN PLACED IN A PAVED AREA.



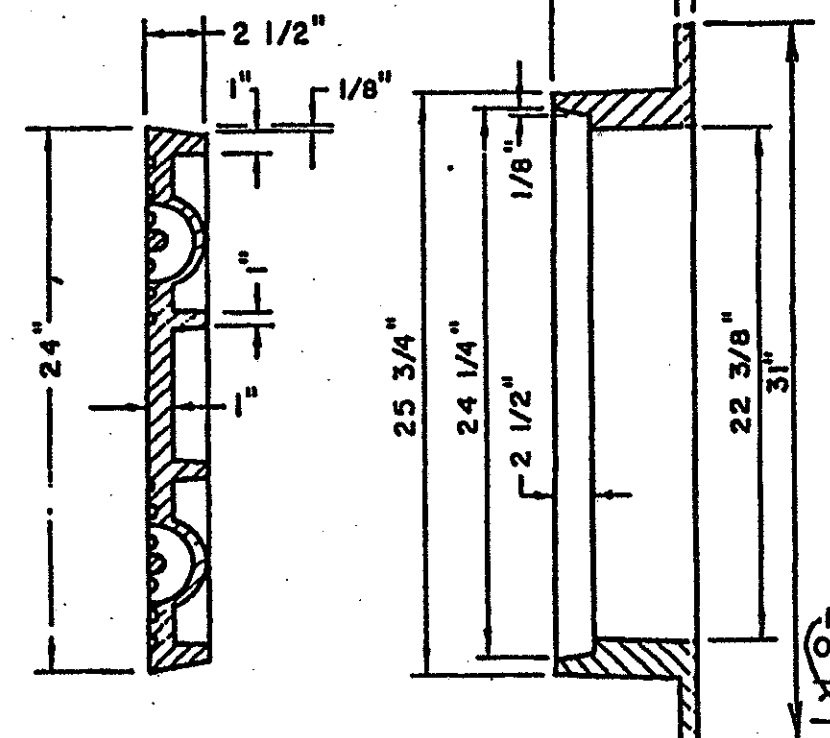
HALF-SECTION TYPICAL CREEK CROSSING

NCT STANDARD SPECIFICATIONS		S.A.S. 10-13-87	
NO.	REVISION	BY	DATE
PUBLIC WORKS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS WATER			
FIRE HYDRANT - SERVICE CONNECTION			
APPROVED			
DATE: JULY, 1996		SHEET SD-2	



MANHOLE RING AND COVER

PROVIDE WITH PICK SLOTS ONLY B AND H 400-24 OR EQUAL



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

COUPLING CONFORMING TO ASTM C-923 WITH O-RING GASKET, KOR-N-SEAL, A-LOK OR APPROVED EQUAL

STANDARD CAST IN PLACE MANHOLE

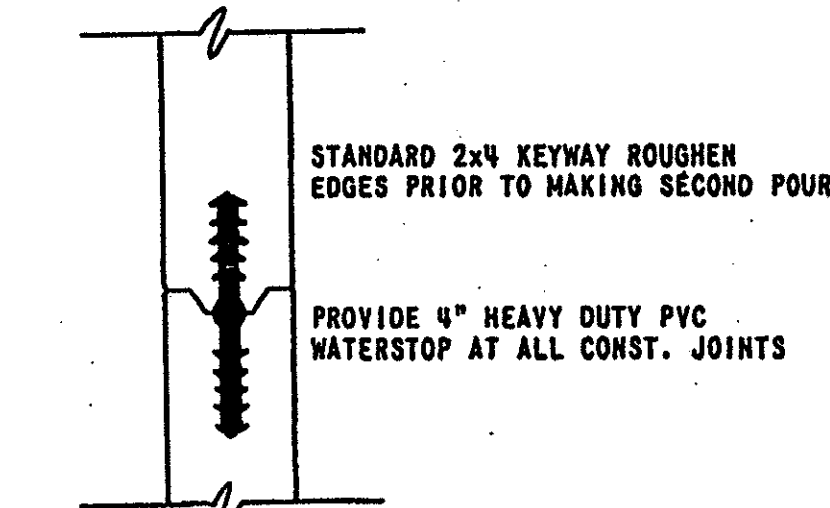
CAST-IN-PLACE NOTES:

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 CLASS F P.S.I. (4200' P.S.I.)

GENERAL NOTES

1. All Sanitary Sewer Pipe Shall Be Vitrified Clay Or PVC SDR-35 Pipe. Other Pipes Shall Be Subject To Approval By The City Engineer
2. Sanitary Sewer Pipe Joints Shall Conform To Current ASTM Designations For Vitrified Clay Pipe And For PVC Pipe.
3. All Sanitary Sewer Laterals Shall Include 4" Tee Wye Band, Pipe And Stopper Installed 10' Feet Downstream From The Water Main Service On Each Lot, Unless Otherwise Indicated On Plans. 6" Laterals Require M.H. At Main Sewer Pipe.
4. Unless Otherwise Noted, All Material And Construction Shall Conform To The Standard Specifications And/or Special Provisions.
5. In The Event An Item Is Not Covered In The City Of Plano Specifications, The City Engineer Decision Shall Apply.
6. Drop Manhole Required For Connection Of 18" Or Greater.
7. All Manholes Shall Be Vacuum Tested In Accordance With The Specs.
8. All Pipes Entering & Leaving A Manhole Shall Be Cradled For A Distance Of 5' Outside Of M.H.

KEYWAY WITH WATERSTOP



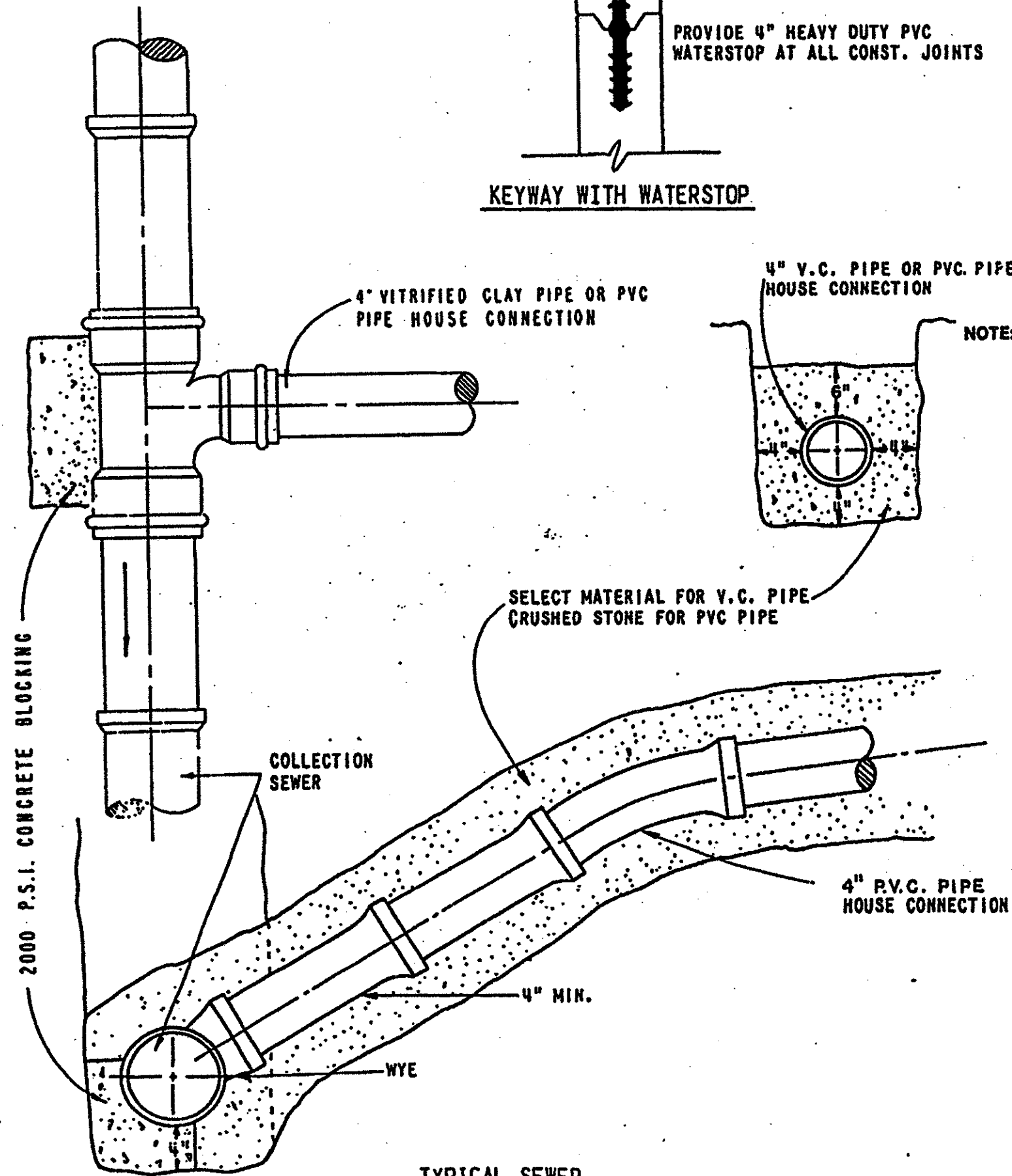
STANDARD 2x4 KEYWAY ROUGHEN EDGES PRIOR TO MAKING SECOND POUR

PROVIDE 4" HEAVY DUTY PVC WATERSTOP AT ALL CONST. JOINTS

4" VITRIFIED CLAY PIPE OR PVC PIPE HOUSE CONNECTION

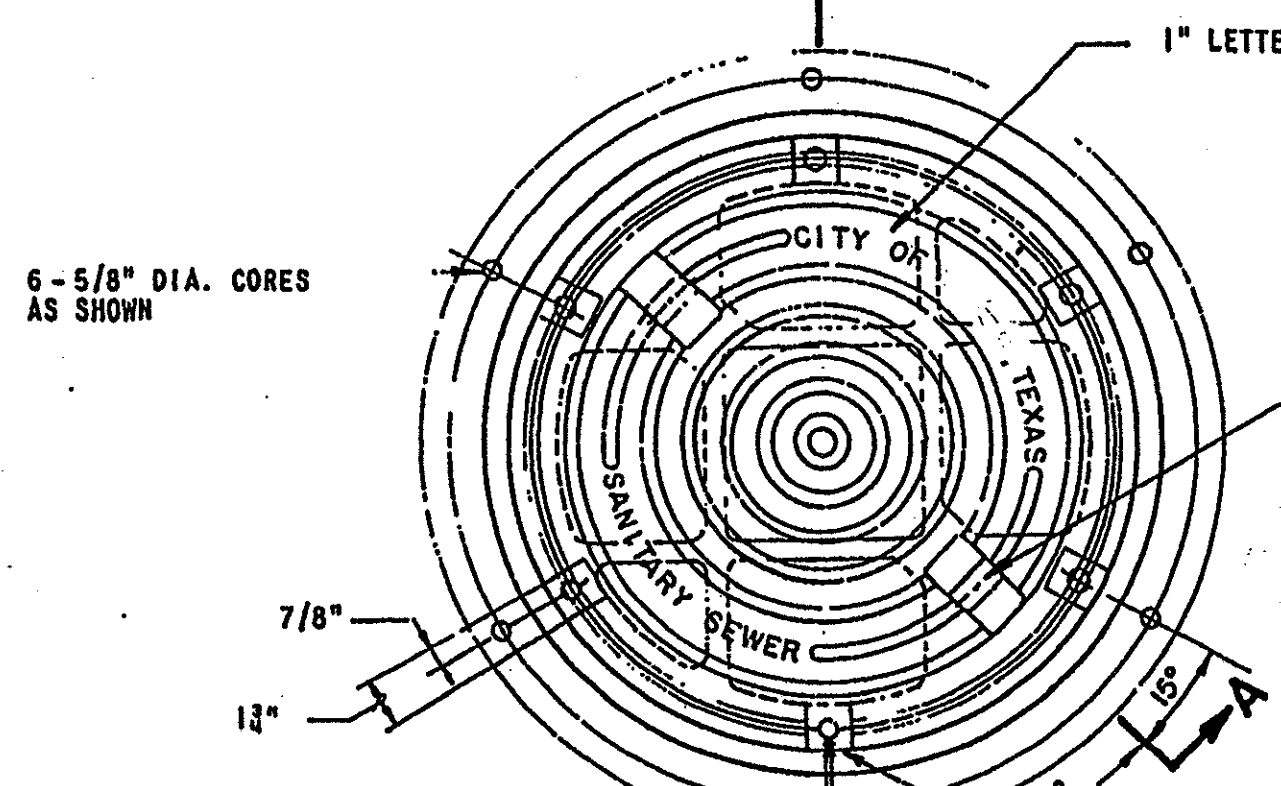
4" V.C. PIPE OR PVC PIPE HOUSE CONNECTION

NOTE: FOR SEAL BETWEEN FRAME AND COVER USE EITHER A 1/16" COPPER GASKET OR A 1/4" DIA. NEOPRENE O-RING GASKET (LOCATION OF O-RING IS LEFT TO MFR. BUT SUBJECT TO APPROVAL BY CONST. ENG.)



TYPICAL SEWER HOUSE SERVICE CONNECTION

M.T.S.

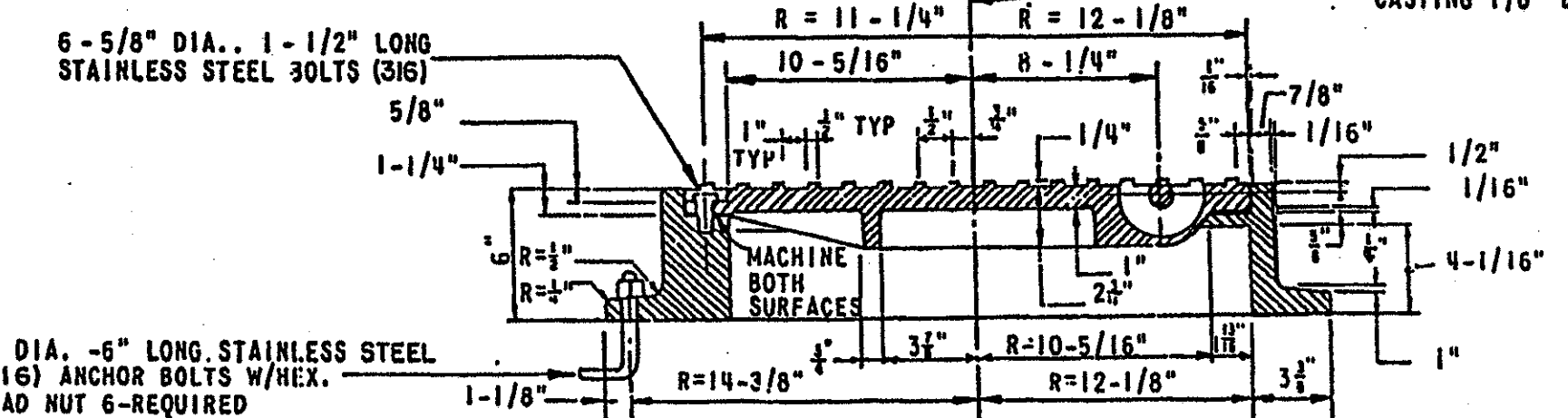


6-5/8" DIA. CORES AS SHOWN

1" LETTERS, RAISED 1/4"

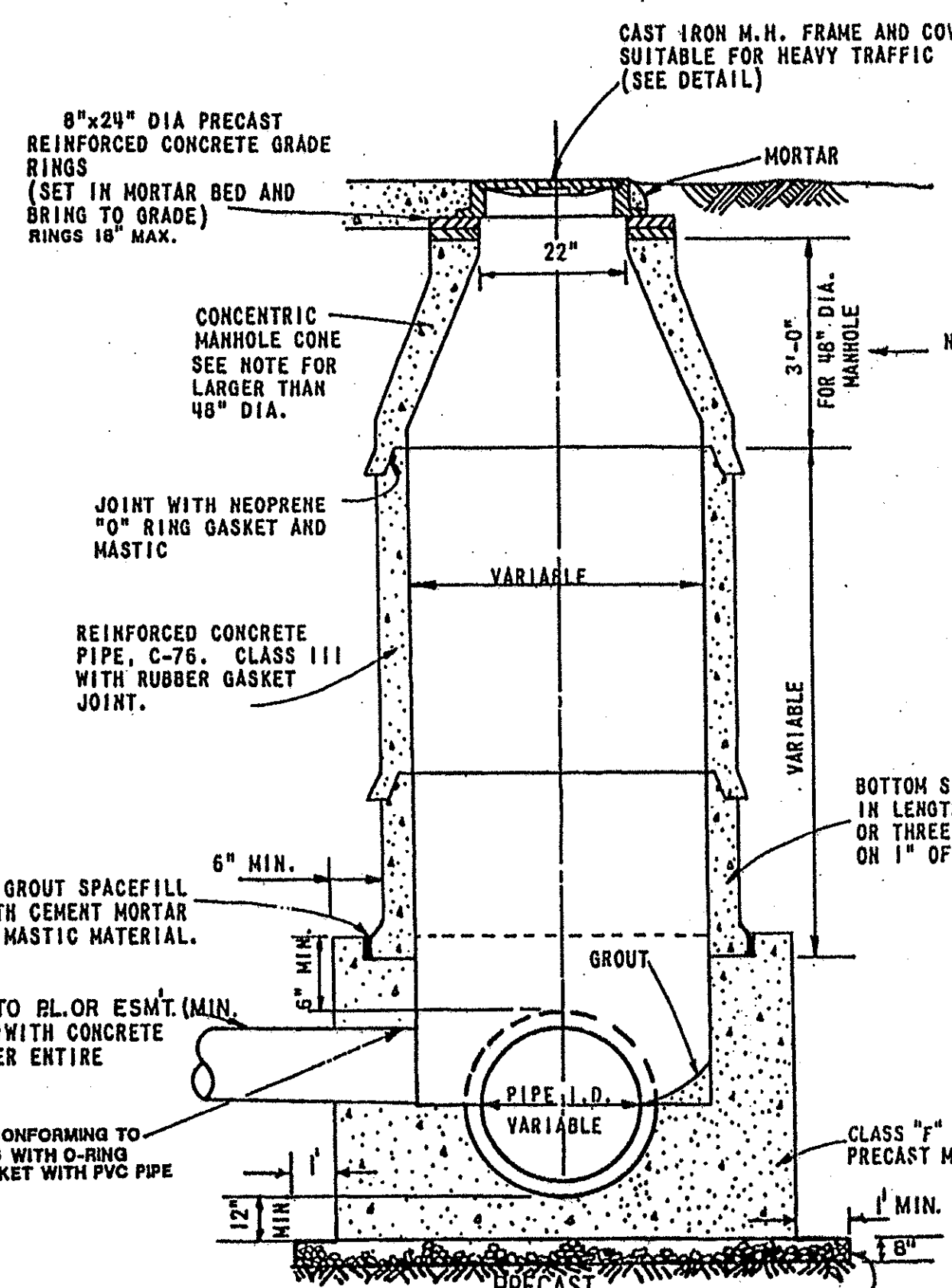
2-3/8" x 2" PICK SLOTS WITH 1-1/4" DIA. STEEL ROD EACH

INDEX MARKS ON FRAME AND COVER INGRAVED INTO CASTING 1/8" DEEP



SECTION A-A PRESSURE TYPE MANHOLE RING AND COVER

1" DIA. STEEL ROD MATERIAL PER ITEM 2.11.5(b)(2) RING & COVER MATERIAL PER ITEM 2.11.5(c)



9"x24" DIA PRECAST REINFORCED CONCRETE GRADE RINGS (SET IN MORTAR BED AND BRING TO GRADE) RINGS 18" MAX.

CONCENTRIC MANHOLE CONE SEE NOTE FOR LARGER THAN 48" DIA.

JOINT WITH NEOPRENE "O" RING GASKET AND MASTIC

REINFORCED CONCRETE PIPE, C-76, CLASS III WITH RUBBER GASKET JOINT.

1" GROUT SPACEFILL WITH CEMENT MORTAR OR MASTIC MATERIAL.

STUB OUTS TO RL OR ESMT. (MIN. OF 5' LONG) WITH CONCRETE CRADLE UNDER ENTIRE LENGTH

COUPLING CONFORMING TO ASTM C-923 WITH O-RING RUBBER GASKET WITH PVC PIPE

CAST IRON M.H. FRAME AND COVER SUITABLE FOR HEAVY TRAFFIC (SEE DETAIL)

MORTAR

22"

FOR 48" DIA. MANHOLE

NOTE A: MANHOLE DIAMETER LARGER THAN 48" I.D. PRE-CAST FLAT TOP MANHOLE COVER AS PER ASTM C478 SHALL BE INSTALLED. FOR HEAVY TRAFFIC SPECIAL DESIGN REQUIRED. SEE DETAIL BELOW.

CLASS "F" CONCRETE BASE FOR PRECAST MANHOLE

1" MIN.

FINISHED GRADE

STD. RING & COVER

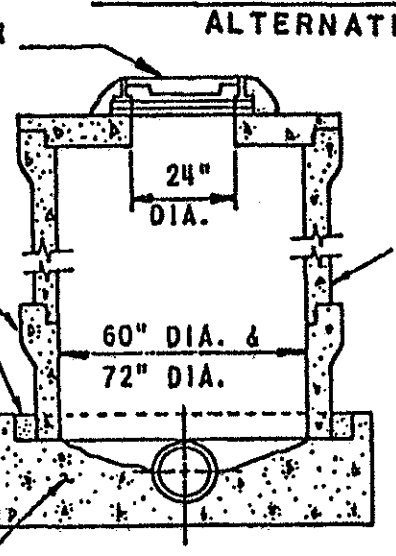
CONCRETE PIPE MANHOLE TYPE 4 CRUSHED ROCK

CAST IRON FRAME & COVER FOR MANHOLE SHALL BE SUITABLE FOR HEAVY TRAFFIC. SEE NOTE A

BOTTOM SECTION OF RISER PIPE BUTT AND BELL

GROUT SPACE TO BE FILLED WITH CEMENT MORTAR OR MASTIC MAT'L.

CLASS "F" CONCRETE BASE FOR PRECAST MANHOLE



PRECAST CONCRETE FLAT TOP MANHOLE

ALTERNATE A

24" DIA.

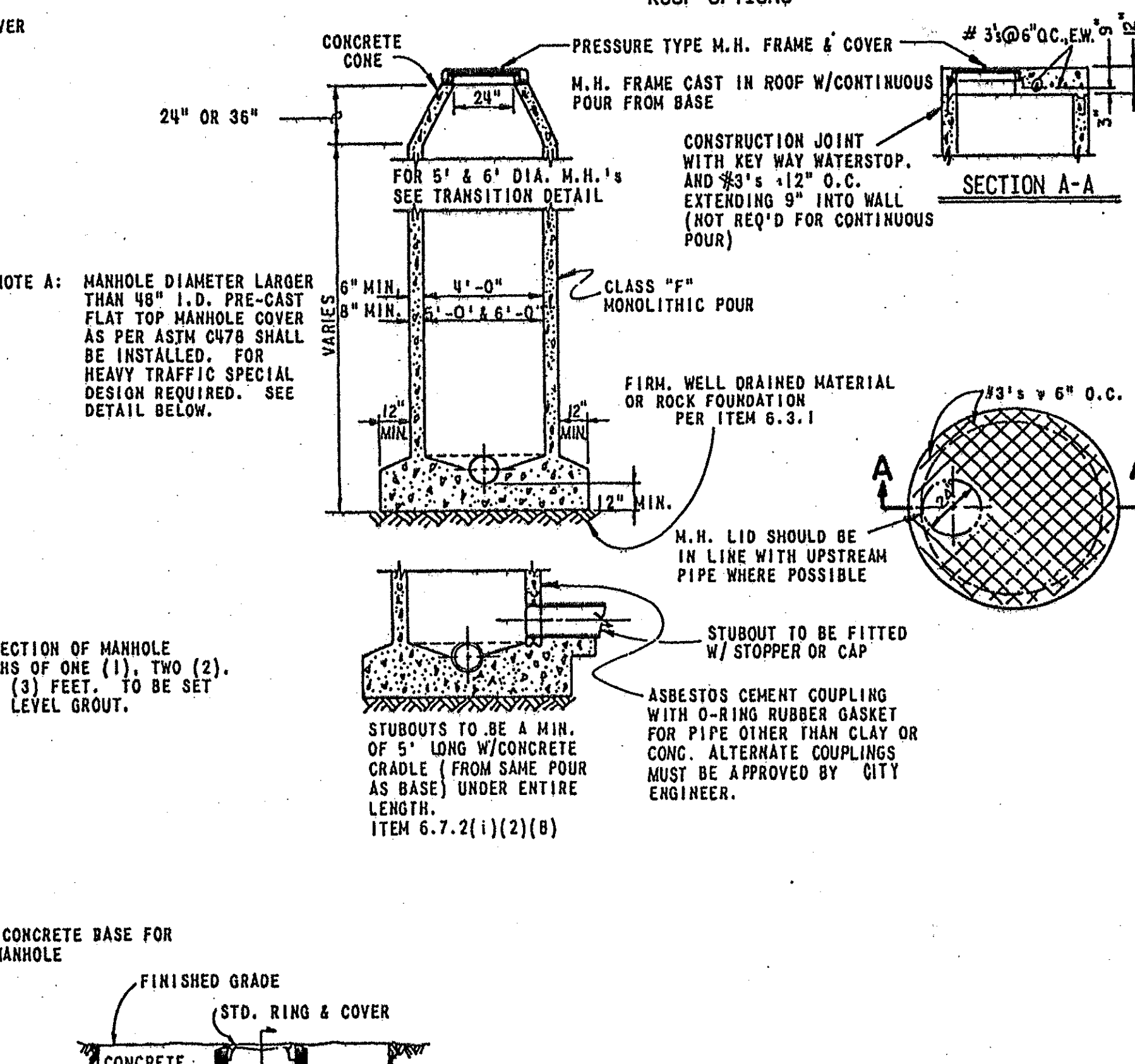
60" DIA. & 72" DIA.

REINFORCED CONCRETE PIPE, C-76, CLASS III WITH RUBBER GASKET JOINT

ENCASE IN CONC. MIN. 6" AROUND DROP PIPE.

SAME AS MAIN- MAX. 12"

TOP OF PIPE OR MAIN LINE FOR PIPE SMALLER THAN 24" DIA.



ROOF OPTIONS

CONCRETE CONE

24" OR 36"

M.H. FRAME CAST IN ROOF W/CONTINUOUS POUR FROM BASE

CONSTRUCTION JOINT WITH KEY WAY WATERSTOP AND 3/8" x 1/2" O.C. EXTENDING 9" INTO WALL (NOT REQ'D FOR CONTINUOUS POUR)

CLASS "F" MONOLITHIC POUR

FIRM, WELL DRAINED MATERIAL OR ROCK FOUNDATION PER ITEM 6.3.1

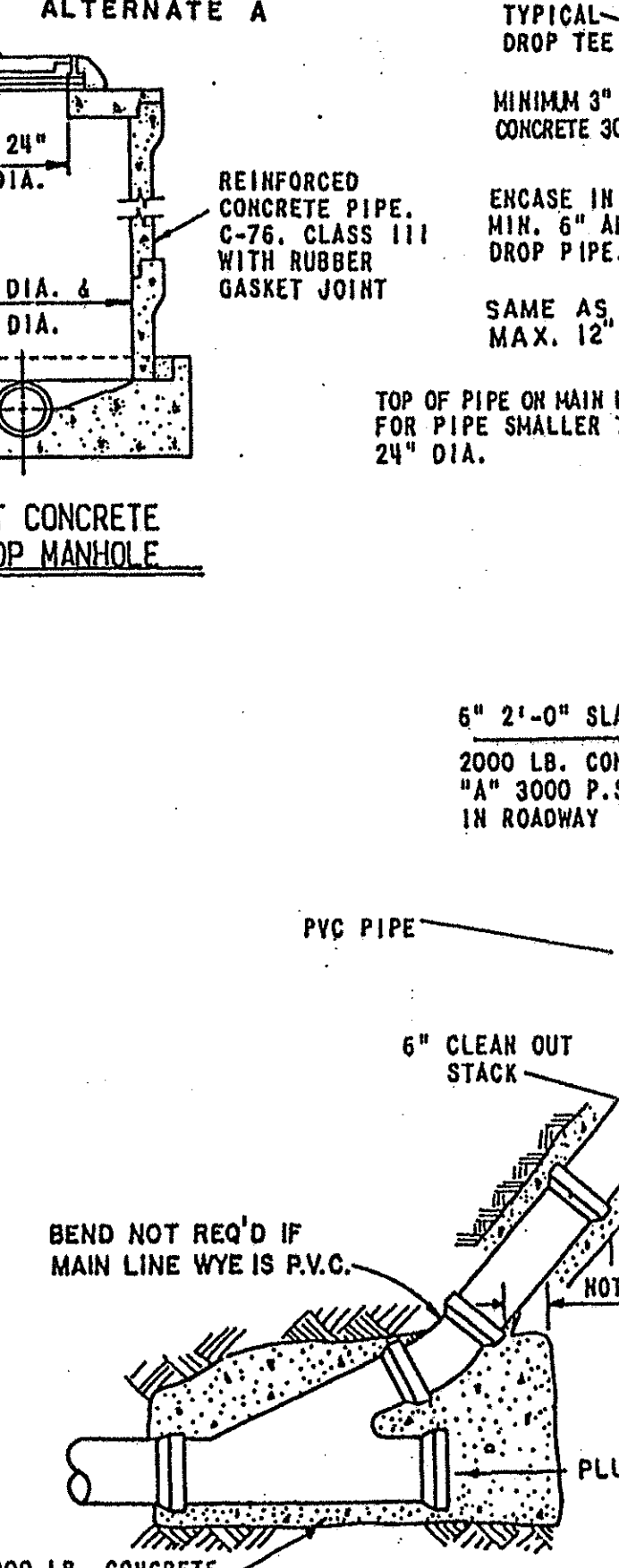
M.H. LID SHOULD BE IN LINE WITH UPSTREAM PIPE WHERE POSSIBLE

STUBOUT TO BE FITTED W/ STOPPER OR CAP

ASBESTOS CEMENT COUPLING WITH O-RING RUBBER GASKET FOR PIPE OTHER THAN CLAY OR CONC. ALTERNATE COUPLINGS MUST BE APPROVED BY CITY ENGINEER.

ITEM 6.7.2(1)(2)(b)

MANHOLE DROP CONNECTION



FINISHED GRADE

STD. RING & COVER

CONCRETE GRADE RINGS FOR ADJUSTMENT 18" MAX.

FLUSH WITH INSIDE FACE M.H.

MINIMUM 3" THICK CONCRETE 3000 PSI

ENCASE IN CONC. MIN. 6" AROUND DROP PIPE.

SAME AS MAIN- MAX. 12"

TOP OF PIPE OR MAIN LINE FOR PIPE SMALLER THAN 24" DIA.

BACKFILL AND INVERT TO CITY SPECIFICATIONS

MANHOLE DROP CONNECTION

BASS & HAYES CASTING #339

6" 2'-0" SLAB 2'-10" LONG 2000 LB. CONCRETE OR CLASS "A" 3000 P.S.I. IF LOCATED IN ROADWAY

6" SPIGOT PLUG J.M. ANFG. CAT # 0078012 OR APPROVED EQUAL

KOR-N-SEAL, OR APPROVED EQUAL, VOIDS TO BE GROUTED.

KOR-N-SEAL, OR APPROVED EQUAL CONNECTOR CONFORMING TO ASTM C-923

6" TO 18" PRESS-SEAL OR APPROVED EQUAL CONN. OVER 18"

EMBEDMENT AS SPECIFIED BY STANDARD DETAILS

NOTE: IF FALSE MANHOLE BOTTOMS REQUIRED, THEY SHALL BE CONSTRUCTED, INSTALLED & REMOVED.

STONE CUSHION FOUNDATION AS PER ITEM 6.3.1

PRECAST CONCRETE MANHOLE

ALTERNATE A OR B: CONCRETE CLASS ITEM 7.4.5 CONCRETE PIPE MATERIAL ITEM 2.12.4 MANHOLE MATERIAL ITEM 2.11.9 MANHOLE CONST. ITEM 6.7.2(1)(1)(3)

M.H. RING & COVER TO BE SET TO GRADE OF PROPOSED PAVEMENT OR FLUSH WITH PROPOSED GROUND GRADE.

STD. C.I.M.H. FRAME & COVER

USE PRECAST CONC. OR RINGS TO RAISE TO GRADE 1" MIN. 18" MAX. AS PER ITEM 2.3.3.

NEOPRENE "O-RING" GASKET AND MASTIC.

NOTE A: SAME AS ALTERNATE A

6" CLEAN OUT STACK

CRUSHED STONE EMBEDMENT REQUIRED

NOT LESS THAN 3"

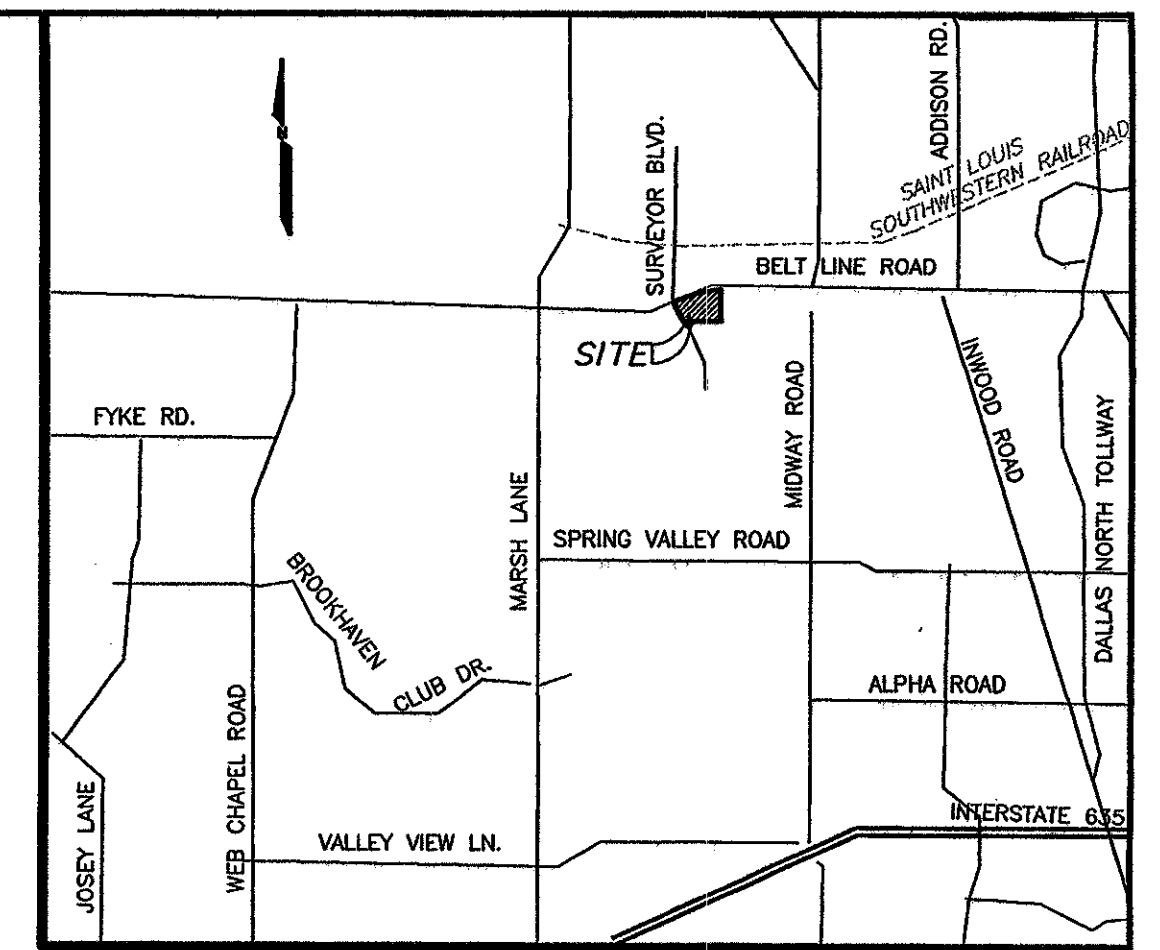
PLUG

2000 LB. CONCRETE

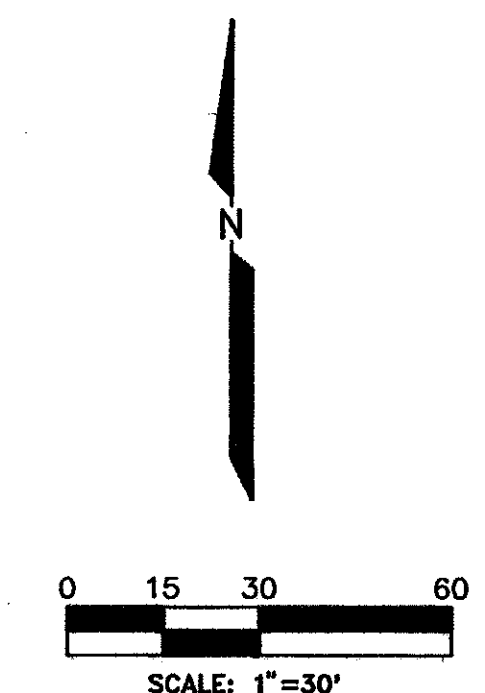
STANDARD CLEANOUT

NOTE: Shallower Parallel Line Required When Flow Line Of Sanitary Sewer Exceeds 12 Ft. Depth. Vertical Drop Connections Not Permitted.

PUBLIC WORKS DEPARTMENT OF ENGINEERING			
STANDARD CONSTRUCTION DETAILS SANITARY SEWER			
MANHOLE - CLEANOUT - CONNECTIONS			
APPROVED			
NO.	NCT STANDARD SPECIFICATIONS	S.A.S.	10-13-87
REVISION	BY	DATE	
DATE: JULY, 1998			
			SHEET SD-3



VICINITY MAP
NTS



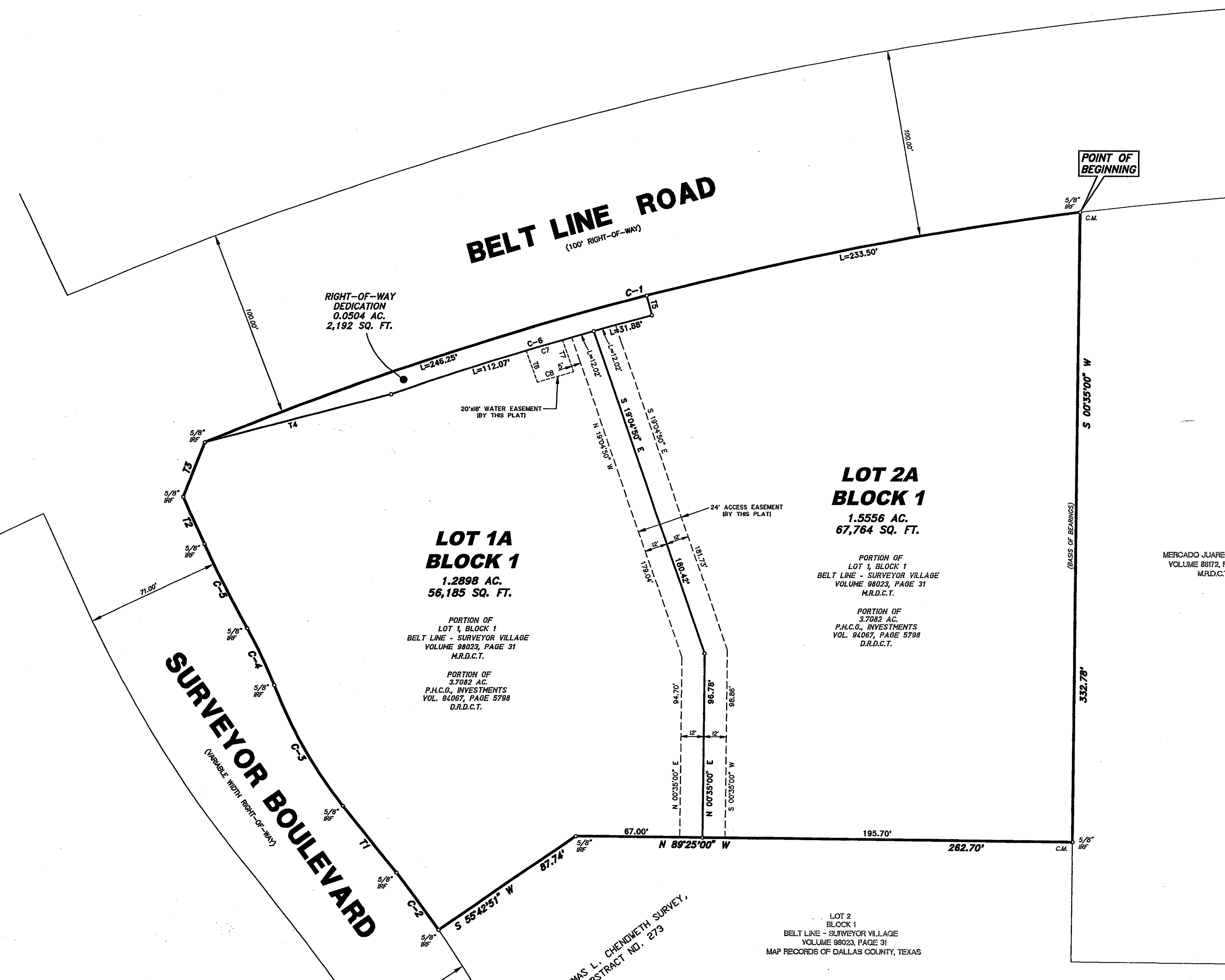
LEGEND

RF - IRON ROD FOUND
RS - IRON ROD SET
CM - CONTROLLING MONUMENT

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS
ON JUN 15 AM 9:55
DALLAS COUNTY CLERK
DALLAS, TEXAS

FINAL PLAT
OF
BELT LINE - SURVEYOR VILLAGE
LOTS 1A & 2A, BLOCK 1
2.8958 ACRES
BEING A REPLAT OF
LOT 1, BLOCK 1 OF BELT LINE - SURVEYOR VILLAGE
THOMAS L. CHENOWETH SURVEY,
ABSTRACT NO. 273
TOWN OF ADDISON, DALLAS COUNTY, TEXAS
APRIL 14, 2004

THIS PLAT FILED IN VOLUME 20411 PAGE 0058, M.R.D.C.T.



LINE TABLE

TANGENT	LENGTH	BEARING
T1	45.30'	N38°26'56\"W
T2	27.55'	N24°07'33\"W
T3	30.68'	N21°40'45\"E
T4	101.72'	N75°35'01\"E
T5	11.00'	S14°35'56\"E
T6	18.02'	N19°04'50\"W
T7	18.02'	S19°04'50\"E

CURVE TABLE

CURVE	RADIUS	DELTA	TANGENT	CHORD	LENGTH	BEARING
C1	1860.00'	14°46'42\"	241.21'	478.42'	479.75'	S75°12'17\"W
C2	630.00'	3°24'49\"	18.77'	37.53'	37.54'	N36°44'31\"W
C3	250.00'	16°48'15\"	36.93'	73.06'	73.32'	S30°02'48\"E
C4	250.00'	7°37'42\"	16.67'	33.26'	33.28'	N25°27'32\"E
C5	559.00'	5°08'57\"	25.14'	50.22'	50.24'	S26°41'54\"E
C6	1849.00'	4°27'39\"	72.01'	143.92'	143.95'	S73°10'14\"W
C7	1849.00'	0°37'14\"	10.01'	20.02'	20.02'	S73°34'31\"W
C8	1831.00'	0°37'36\"	10.01'	20.02'	20.02'	S73°36'05\"W

NOTE:
5/8 INCH IRON RODS SET AT ALL LOT CORNERS
UNLESS OTHERWISE NOTED.

BASIS OF BEARINGS:
BEARINGS SHOWN HEREON ARE BASED UPON THE WEST LINE OF
MERCADO JUAREZ ADDITION, RECORDED IN VOL. 88172, PAGE 3189,
OF THE MAP RECORDS OF DALLAS COUNTY, TEXAS.

APPROVED BY ADDISON CITY COUNCIL ON APRIL 13, 2004.

MAYOR: *[Signature]*
CITY SECRETARY: *[Signature]*

ENGINEER/SURVEYOR: LAWRENCE A. CATES & ASSOC. INC.
14200 MIDWAY RD. STE. 122
DALLAS, TEXAS 75244
(972) 385-2272
CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.

OWNER: PHCG INVESTMENTS
642 YALE STREET
HOUSTON, TEXAS 77007
CONTACT: CHRIS PAPPAS

OWNER'S CERTIFICATE

STATE OF TEXAS
COUNTY OF DALLAS

WHEREAS, PHCG INVESTMENTS, is the owner of all that certain lot, tract or parcel of land situated in the Thomas L. Chenoweth Survey, Abstract No. 273 in the Town of Addison, Texas, and being known as Lot 1 in Block 1 of Belt Line-Surveyor Village, an addition to the Town of Addison, Texas, according to the plat thereof recorded in Volume 98023 of Page 31 of the Map Records of Dallas County, Texas, and being a part of the 3.7082 acre tract conveyed to P.H.C.G. Investments, by deed recorded in Volume 94067 of Page 5798 of the Deed Records of Dallas County, Texas, and being more particularly described as follows;

BEGINNING at a 5/8" iron rod found for the Northeast corner of said Lot 1 in Block 1 of Belt Line-Surveyor Village, same being the Northeast corner of said P.H.C.G Investments 3.7082 acre tract and also being the Northwest corner of Mercado Juarez Addition, an addition to the Town of Addison, Texas, according to the plat thereof recorded in Volume 88172 at Page 3189 of the Map Records of Dallas County, Texas, and being more particularly described by metes and bounds as follows;

THENCE South 0° 35' 00" West along the East line of said Lot 1 in Block 1 of said Belt Line-Surveyor Village, same being the West line of said Mercado Juarez Addition for a distance of 332.78 feet to a 5/8 inch iron rod found for the Southeast corner of said Lot 1 in Block 1 of the Belt Line-Surveyor Village;

THENCE North 89° 25' 00" West along the South line of said Lot 1 in Block 1 of the Belt Line-Surveyor Village, same being the North line of Lot 2 in Block 1 of the Belt Line-Surveyor Village for a distance of 262.70 feet to a 5/8" iron rod found for corner;

THENCE South 55° 42' 51" West and continuing along the South line of Lot 1 in Block 1 of the Belt Line-Surveyor Village and being common to the North line of Lot 2 in Block 1 of the Belt Line-Surveyor Village for a distance of 87.74 feet to a 5/8" iron rod found for corner in the East right of way line of Surveyor Boulevard (60 foot right of way at this point), said point being in a curve to the left having a central angle of 03° 24' 49" with a radius of 630.00 feet and a chord bearing North 36° 44' 31" West at a distance of 37.53 feet;

THENCE Northwesterly along said curve to the left and following along the East right of way line of Surveyor Boulevard for an arc distance of 37.54 feet to a 5/8" iron rod found for corner;

THENCE North 38° 26' 56" West and continuing along the East right of way line of said Surveyor Boulevard for a distance of 45.30 feet to a 5/8" iron rod found for corner, said point being the beginning of a curve to the right having a central angle of 16° 48' 15" with a radius of 250.00 feet and a chord bearing North 30° 02' 48" West at a distance of 73.06 feet;

THENCE Northwesterly along said curve to the right and following along the East right of way line of Surveyor Boulevard for an arc distance of 73.32 feet to a 5/8" iron rod found for corner, said point being the beginning of a curve to the left having a central angle of 07° 37' 42" with a radius of 250.00 feet and a chord bearing North 25° 27' 32" West at a distance of 33.26 feet;

THENCE Northwesterly along said curve to the left for an arc distance of 33.28 feet to a 5/8" iron rod found for corner, said point being the beginning of a curve to the right having a central angle of 05° 08' 57" with a radius of 559.00 feet and a chord bearing North 26° 41' 54" West at a distance of 50.22 feet;

THENCE Northwesterly along said curve to the right and following along the East right of way line of said Surveyor Boulevard for a distance of 50.24 feet to a 5/8" iron rod found for corner;

THENCE North 24° 07' 33" West and continuing along the East right of way line of Surveyor Boulevard for a distance of 27.55 feet to a 5/8" iron rod found for corner, said point being the beginning of a cut-off line for Belt Line Road;

THENCE North 21° 40' 45" East said cut-off line for Belt Line Road for a distance of 30.68 feet to a 5/8" iron rod found for corner in the South right of way line of Belt Line Road, said point being in a curve to the right having a central angle of 14° 46' 42" and a radius of 1860.00 feet and a chord bearing North 75° 12' 17" East at a distance of 478.42 feet to the POINT OF BEGINNING AND CONTAINING 2.8958 ACRES OF LAND, more or less.

OWNER'S DEDICATION

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

THAT PHCG INVESTMENTS, DOES HEREBY ADOPT THIS PLAT DESIGNATING THE HEREINAFORE PROPERTY AS BELT LINE - SURVEYOR VILLAGE, AN ADDITION TO THE TOWN OF ADDISON, TEXAS AND, SUBJECT TO THE CONDITIONS, RESTRICTIONS AND RESERVATIONS STATED HEREINAFTER, OWNER DEDICATES TO THE PUBLIC USE FOREVER THE STREETS AND ALLEYS SHOWN THEREON.

THE EASEMENTS SHOWN ON THIS PLAT ARE HEREBY RESERVED FOR THE PURPOSES AS INDICATED, INCLUDING, BUT NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF WATER, SANITARY SEWER, STORM SEWER, DRAINAGE, ELECTRIC, TELEPHONE, GAS AND CABLE TELEVISION. OWNER SHALL HAVE THE RIGHT TO USE THESE EASEMENTS, PROVIDED HOWEVER, THAT IT DOES NOT UNREASONABLY INTERFERE OR IMPEDE WITH THE PROVISION OF THE SERVICE TO OTHERS. SAID UTILITY EASEMENTS ARE HEREBY BEING RESERVED BY MUTUAL USE AND ACCOMMODATION OF ALL PUBLIC UTILITIES USING OR DESIRING TO USE THE SAME. AN EXPRESS EASEMENT OF INGRESS AND EGRESS IS HEREBY EXPRESSLY GRANTED ON, OVER AND ACROSS ALL SUCH EASEMENTS FOR THE BENEFIT OF THE PROVIDER FO SERVICES FOR WHICH EASEMENTS ARE GRANTED

ANY DRAINAGE AND FLOODWAY EASEMENT SHOW HEREON IS HEREBY DEDICATED TO THE PUBLIC'S USE FOREVER, BUT INCLUDING THE FOLLOWING COVENANTS WITH REGARDS TO MAINTENANCE RESPONSIBILITIES. THE EXISTING CHANNELS OR CREEKS TRAVERSING THE DRAINAGE AND FLOODWAY EASEMENT WILL REMAIN AS AN OPEN CHANNEL, UNLESS REQUIRED TO BE ENCLOSED BY ORDINANCE, AT ALL TIMES AND SHALL BE MAINTAINED BY THE INDIVIDUAL OWNERS OF THE LOT OR LOTS THAT ARE TRAVERSED BY OR ADJACENT TO THE DRAINAGE AND FLOODWAY EASEMENT. THE CITY WILL NOT BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF SAID CREEK OR CREEKS OR FOR ANY DAMAGE OR INJURY OF PRIVATE PROPERTY OR PERSON THAT RESULTS FROM THE FLOW OF WATER ALONG SAID CREEK, OR FOR THE CONTROL OF EROSION. NO OBSTRUCTION TO THE NATURAL FLOW OF WATER RUN-OFF SHALL BE PERMITTED BY CONSTRUCTION OF ANY TYPE BUILDING, FENCE OR ANY OTHER STRUCTURE WITHIN THE DRAINAGE AND FLOODWAY EASEMENT. PROVIDED, HOWEVER, IT IS UNDERSTOOD THAT IN THE EVENT IT BECOMES NECESSARY FOR THE CITY TO CHANNELIZE OR CONSIDER ERRECTING ANY TYPE OF DRAINAGE STRUCTURE IN ORDER TO IMPROVE THE STORM DRAINAGE, THEN IN SUCH EVENT, THE CITY SHALL HAVE THE RIGHT, BUT NOT THE OBLIGATION, TO ENTER UPON THE DRAINAGE AND FLOODWAY EASEMENT AT ANY POINT, OR POINTS, WITH ALL RIGHTS OF INGRESS AND EGRESS TO INVESTIGATE, SURVEY, ERECT, CONSTRUCTION OR MAINTAIN ANY DRAINAGE FACILITY DEEMED NECESSARY BY THE CITY FOR MAINTENANCE OR EFFICIENCY OF ITS RESPECTIVE SYSTEM OR SERVICE.

WATER MAIN AND SANITARY SEWER EASEMENTS SHALL ALSO INCLUDE ADDITIONAL AREA OF WORKING SPACE FOR CONSTRUCTION AND MAINTENANCE OF THE THE SYSTEMS. ADDITIONAL EASEMENT AREA AREA IS ALSO CONVEYED FOR INSTALLATION AND MAINTENANCE OF MANHOLES, CLEANOUTS, FIRE HYDRANTS, WATER SERVICE AND SEWER SERVICES FROM THE MAIN TO CURB OR PAVEMENT LINE, AND THE DESCRIPTIONS OF SUCH ADDITIONAL EASEMENTS HEREIN GRANTED SHALL BE DETERMINED BY THEIR LOCATIONS AS INSTALLED.

THIS PLAT IS APPROVED SUBJECT TO ALL PLATTING ORDINANCES, RULES, REGULATIONS AND RESOLUTIONS OF THE TOWN OF ADDISON, TEXAS.

WITNESS, MY HAND AT DALLAS, TEXAS THIS THE 21st DAY OF May, 2004.

PHCG INVESTMENTS

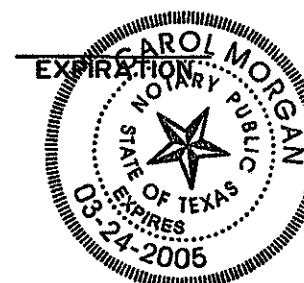
BY: *Pete H. Pappas*
CHRIS PAPPAS
Pete H. Pappas

STATE OF TEXAS
COUNTY OF TARRANT

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED *Pete H. Pappas* PERSONALLY KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 21st DAY OF May, 2004.

Carole Morgan
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS



SURVEYOR'S CERTIFICATION

I, LAWRENCE A. CATES, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT I HAVE PREPARED THIS PLAT FROM AN ACTUAL ON THE GROUND SURVEY OF THE LAND, AND THE MONUMENTS SHOWN HEREON WERE FOUND AND/OR PLACED UNDER MY PERSONAL SUPERVISION IN ACCORDANCE WITH THE PLATTING RULES AND REGULATIONS OF THE CITY PLAN COMMISSION OF THE TOWN OF ADDISON, TEXAS.

Lawrence A. Cates

LAWRENCE A. CATES
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 3717



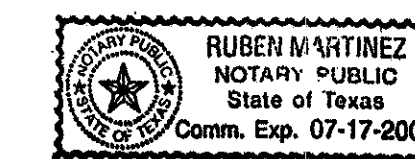
STATE OF TEXAS
COUNTY OF DALLAS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED LAWRENCE A. CATES, PERSONALLY KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE ABOVE AND FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION EXPRESSED AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE ON THIS THE 22nd DAY OF May, 2004.

Ruben Martinez
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

7-17-04
EXPIRATION



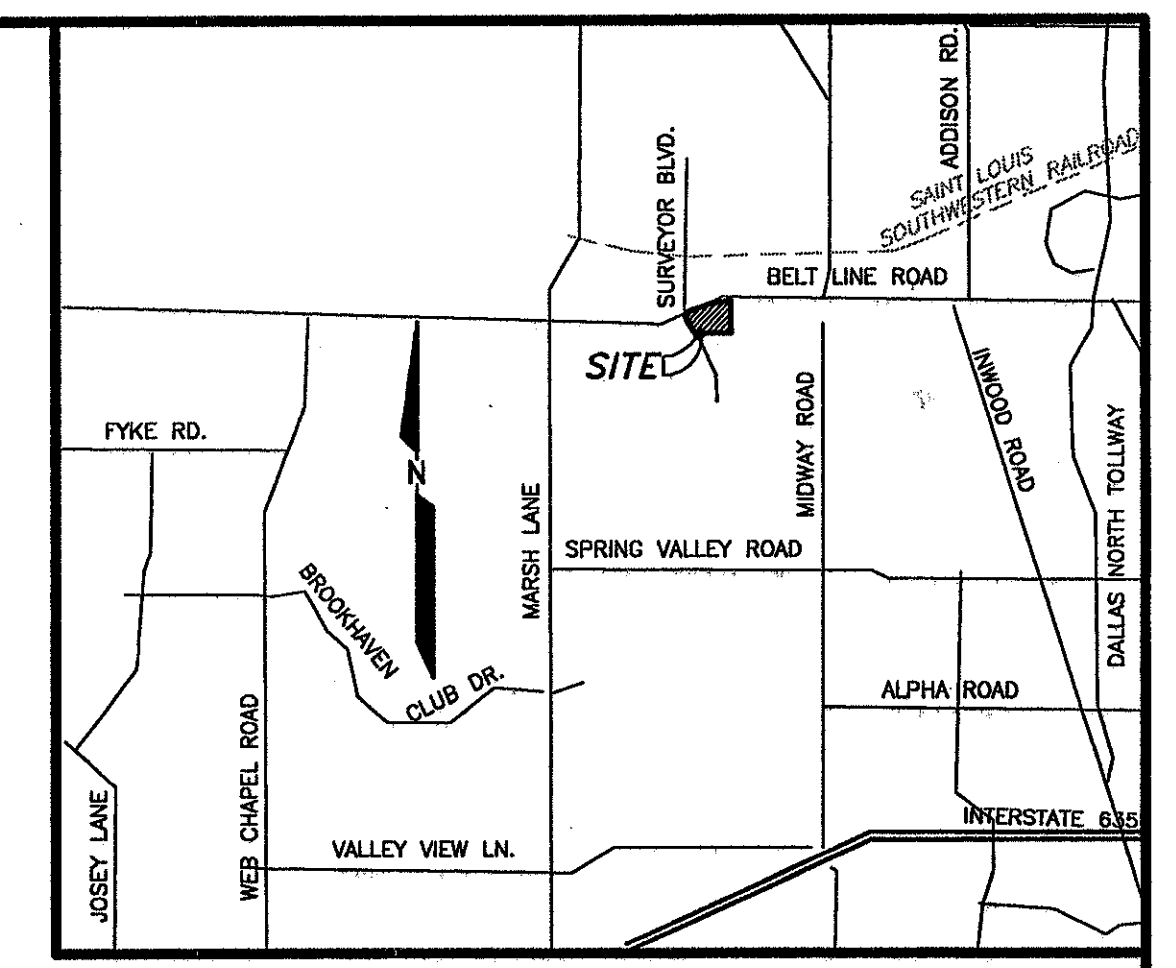
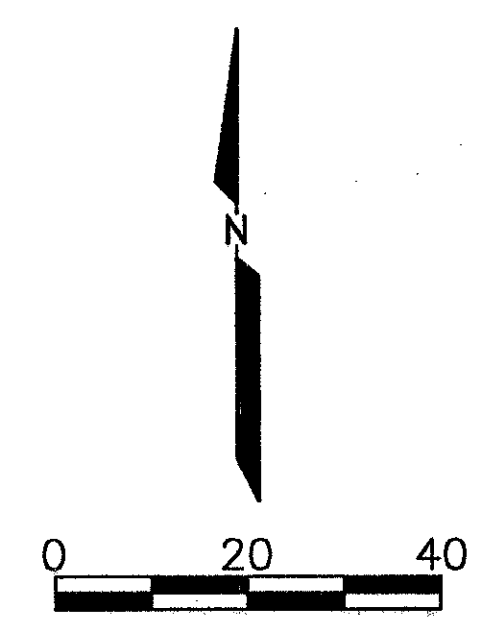
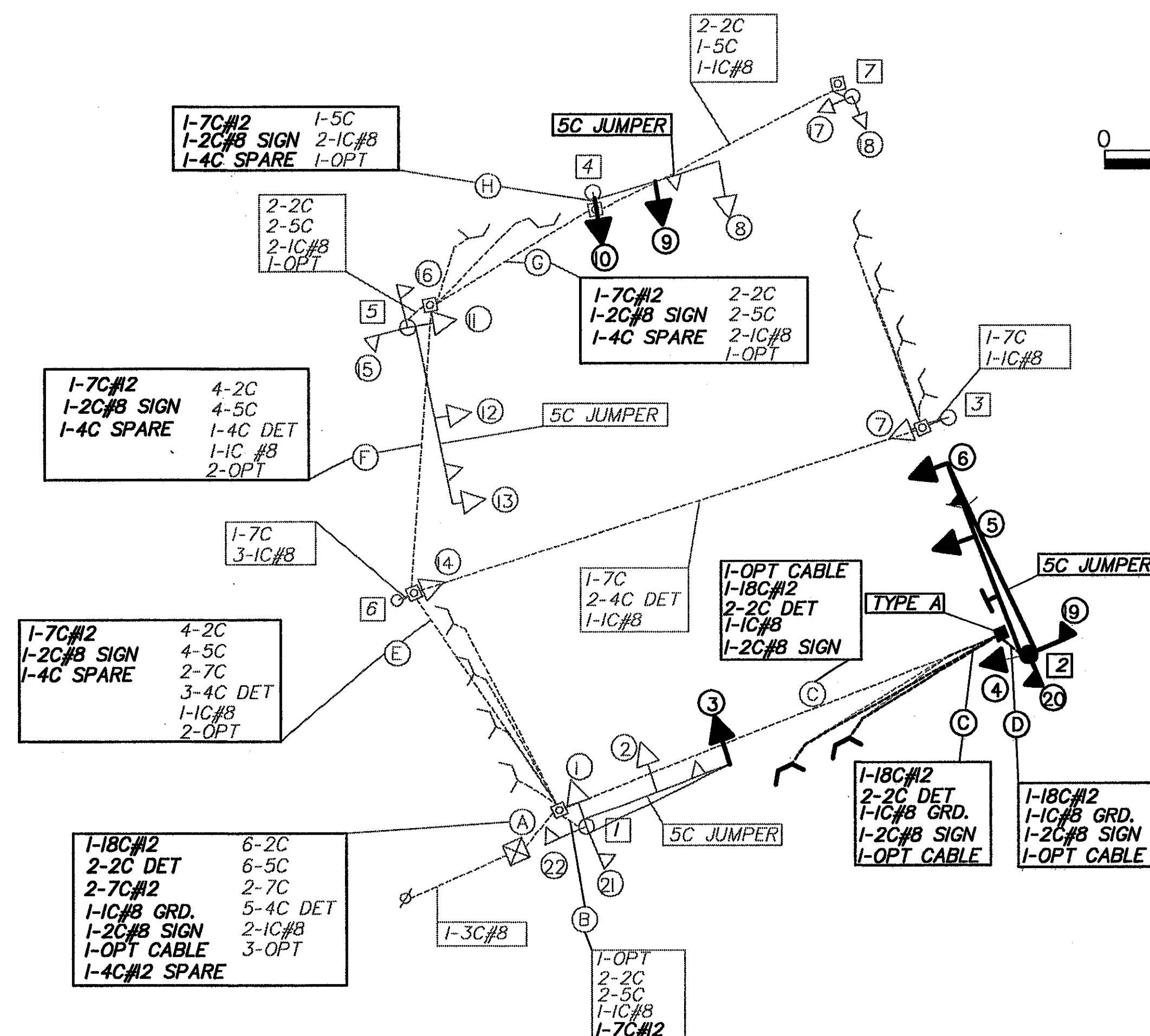
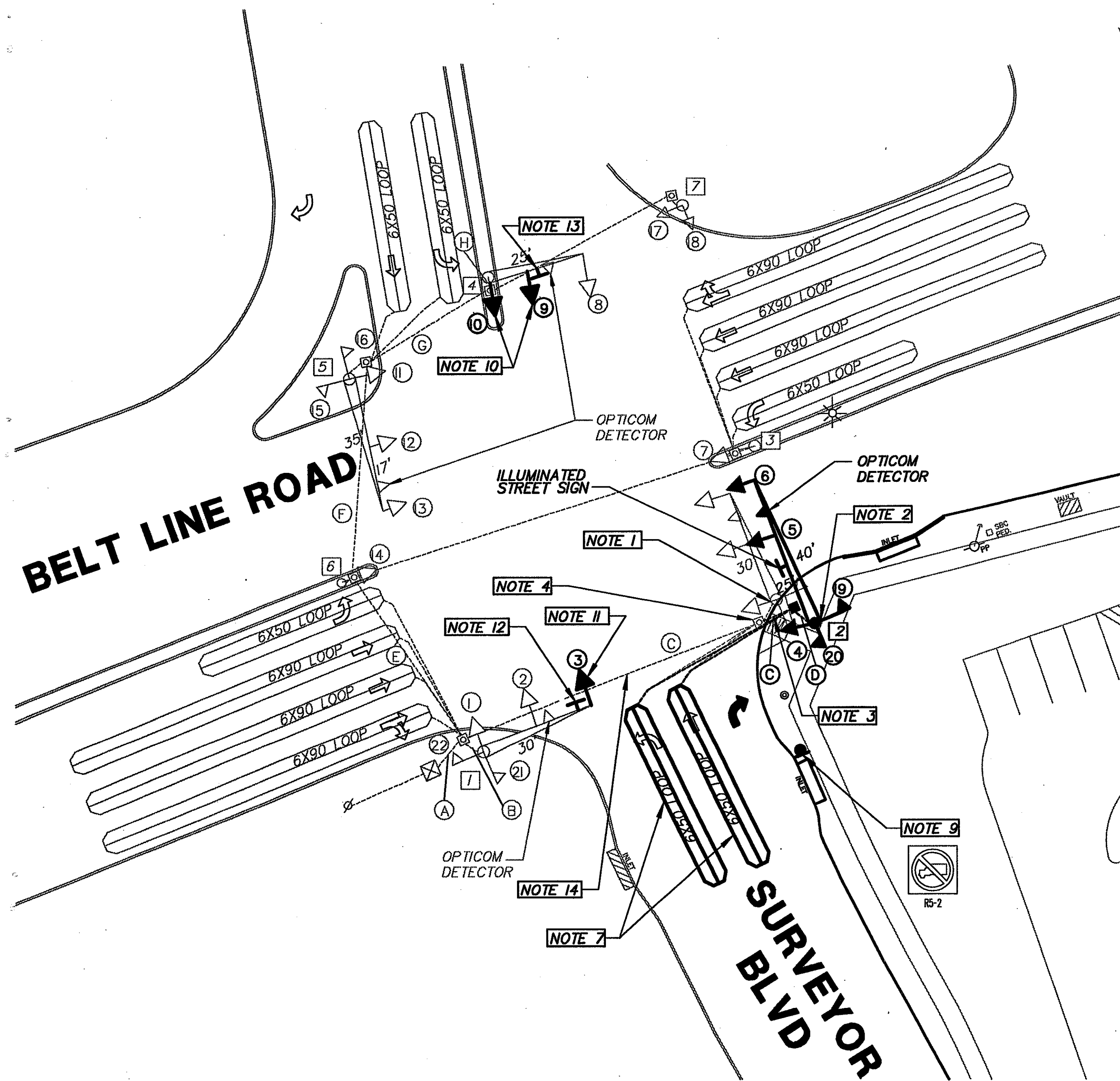
FILED AND RECORDED
04 JUN 15 AM 9:55
Dallas County Clerk
DALLAS COUNTY, TEXAS

FINAL PLAT
OF
BELT LINE - SURVEYOR VILLAGE
LOTS 1A & 2A, BLOCK 1
2.8958 ACRES
BEING A REPLAT OF
LOT 1, BLOCK 1 OF BELT LINE - SURVEYOR VILLAGE
THOMAS L. CHENOWETH SURVEY,
ABSTRACT NO. 273
TOWN OF ADDISON, DALLAS COUNTY, TEXAS
MAY 18, 2004

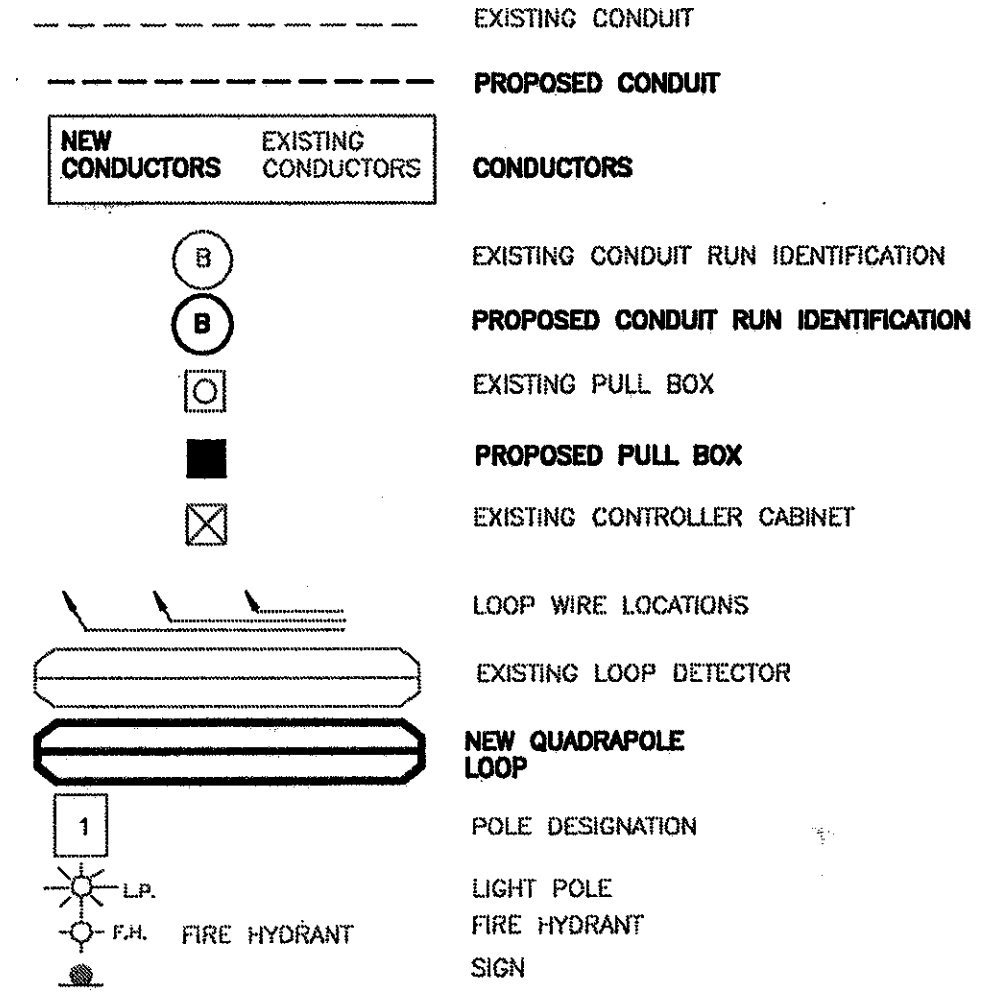
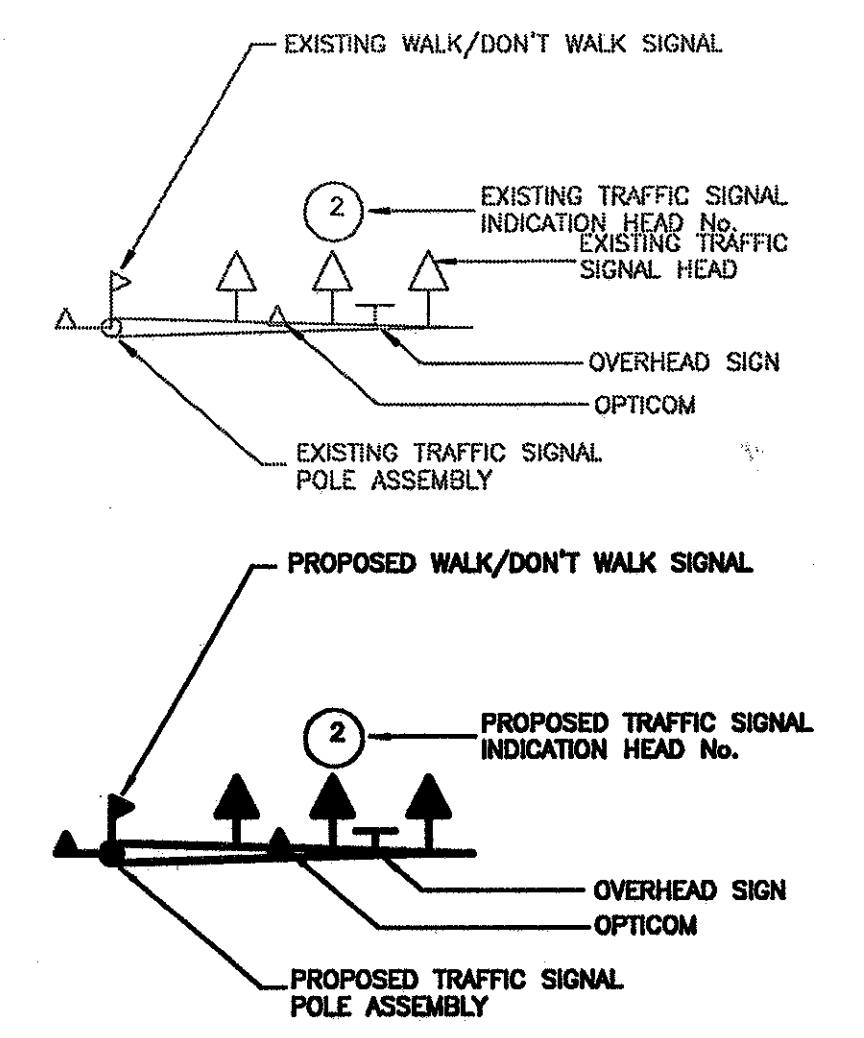
ENGINEER/SURVEYOR
LAWRENCE A. CATES & ASSOC. INC.
14200 MIDWAY RD. STE. 122
DALLAS, TEXAS 75244
(972) 385-2272
CONTACT: LAWRENCE A. CATES, P.E., R.P.L.S.

OWNER
PHCG INVESTMENTS
642 YALE STREET
HOUSTON, TEXAS 77007
CONTACT: CHRIS PAPPAS

THIS PLAT FILED IN VOLUME 20411 PAGE 00058 M.R.D.C.T.



VICINITY MAP



NOTES:

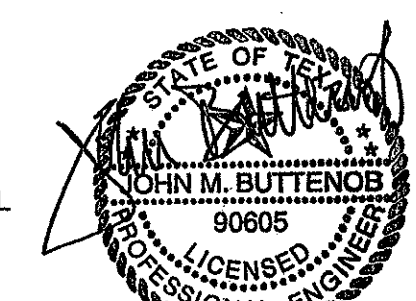
- EXISTING SIGNAL POLE ASSEMBLY INCLUDING SIGNAL HEADS TO BE REMOVED BY CONTRACTOR AND RETURNED TO TOWN OF ADDISON PUBLIC WORKS DEPARTMENT. REMOVE OLD FOUNDATION AND BOLTS TO 24" BELOW FINISHED GRADE.
- NEW SIGNAL POLE ASSEMBLY WILL BE SUPPLIED BY THE CONTRACTOR PER THE TOWN OF ADDISON SPECIFICATIONS AND DETAILS. THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION OF NEW SIGNAL POLE ASSEMBLY, SIGNAL HEADS, OPTICOM, PEDESTRIAN HEADS AND ILLUMINATED STREET NAME SIGN. POLE SHALL BE LOCATED AS INDICATED ON PLANS. POLE FOUNDATION SHALL BE A TYPE 36-B AS DETAILED AND SPECIFIED ON TEXAS DEPARTMENT OF TRANSPORTATION STANDARD PLAN TS-FD-99. THE MAST ARM SHALL BE 40 FEET IN LENGTH. SIGNAL HEAD NO. 6 SHALL BE LOCATED AT END OF MAST ARM. SIGNAL HEAD NO. 5 SHALL BE LOCATED 15 FEET FROM END OF MAST ARM.
- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING CONDUIT OF RUN C AND EXTENDING THE CONDUIT TO THE NEW PULLBOX AS SHOWN.
- CONTRACTOR SHALL REMOVE PULL BOX AS INDICATED ON PLANS. NEW PULLBOX TO BE INSTALLED PER TOWN OF ADDISON SPECIFICATIONS AND DETAILS.
- CONTRACTOR SHALL COORDINATE WITH COMCAST AND ONCOR IN ORDER TO RAISE THE OVERHEAD LINES ON THE SOUTH SIDE OF THE INTERSECTION. THE WIRES SHOULD BE RAISED SUCH THAT THEY WILL CLEAR THE PROPOSED MAST ARM BY 30".
- CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND INCORPORATING ALL APPLICABLE TOWN OF ADDISON SPECIFICATIONS FOR THIS JOB.
- REMOVE EXISTING LOOP DETECTORS. NEW LOOP DETECTORS WILL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR PER THE TOWN OF ADDISON SPECIFICATIONS AND DETAILS.
- DUE TO THE ADDITION OF LEFT TURN PHASING FOR NORTHBOUND AND SOUTHBOUND APPROACHES, SIGNAL TIMING MODIFICATIONS WILL BE REQUIRED BY TOWN OF ADDISON'S TRAFFIC ENGINEERING CONSULTANT.
- RELOCATE EXISTING "NO TRUCKS" SIGN (MUTCD R5-2, 24"x24") TO LOCATION AS INDICATED ON PLANS.
- RELOCATE POLE MOUNTED, 3-SECTION SIGNAL HEAD FOR NORTHBOUND APPROACH 15 FEET FROM END OF MAST ARM AS SHOWN FOR SIGNAL HEAD NO. 9. THE CONTRACTOR WILL SUPPLY A FOUR-SECTION SIGNAL HEAD PER TOWN OF ADDISON SPECIFICATIONS AND DETAILS. THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION OF NEW FOUR-SECTION SIGNAL HEAD NO. 10 ON POLE NO. 4.
- REMOVE POLE MOUNTED, 3-SECTION SIGNAL HEAD NO. 3 AND RETURN TO TOWN OF ADDISON PUBLIC WORKS DEPARTMENT. THE CONTRACTOR WILL SUPPLY A FOUR-SECTION SIGNAL HEAD PER TOWN OF ADDISON SPECIFICATIONS AND DETAILS. THE CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION OF NEW FOUR-SECTION SIGNAL HEAD NO. 3 AT END OF MAST ARM ON POLE NO. 1.
- CONTRACTOR SHALL INSTALL LEFT TURN YIELD ON GREEN (MUTCD R10-12, 30"x36") ON POLE NO. 4 BELOW SIGNAL HEAD NO. 10 AND ON POLE NO. 1 NEXT TO SIGNAL HEAD NO. 3.
- CONTRACTOR SHALL INSTALL INTERSECTION LANE CONTROL SIGN (TX MUTCD R3-8B, 36"x30").
- CONTRACTOR SHALL INSTALL NEW CONDUCTORS FROM CONTROLLER CABINET TO NEW POLE NO. 2 AND EXISTING POLE NO. 4 PER THE CONDUIT/CONDUCTOR SCHEDULE.

SIGNAL HEAD ARRAYS			
HEAD NUMBERS	4,5,6	3,10	19,20
LENS SIZE	12"	12"	
TYPE	LED	LED	LED PED.
LENS CONFIGURATION	R	R	DW
	Y	Y	WALK
	G	G	
TOTAL NUMBER OF UNITS	3	2	2

TABLE ABOVE ONLY SHOWS NEW SIGNAL HEADS

CONDUIT/CONDUCTOR SCHEDULE								
RUN	PVC CONDUIT T-TRENCH B-BORE	18C#12	2C(SH) (DET.)	1C #8 (GRD.)	2C #8 (SIGNS.)	4C#12 (SPARE)	7C#12	OPT CABLE
A	EXIST.	20'	40'	20'	20'	20'	40'	20'
B	EXIST.						70'	
C(EXIST.)	EXIST.	95'	190'	95'	95'			95'
C	2"T -10'	20'	40'	20'	20'			20'
D	2"T -5'	65'		50'	50'			65'
E	EXIST.				60'	60'	60'	
F	EXIST.				70'	70'	70'	
G	EXIST.				50'	50'	50'	
H	EXIST.				50'	50'	20'	
TOTAL	2"T -15'	200'	270'	185'	415'	250'	310'	200'

TABLE ABOVE ONLY SHOWS QUANTITIES OF NEW CONDUCTORS AND CONDUITS



REV.	DATE	REMARKS
TRAFFIC SIGNAL PLAN		
SOUTHTRUST BANK		
BELT LINE - SURVEYOR VILLAGE ADDITION		
TOWN OF ADDISON, TEXAS		
LAWRENCE A. CATES & ASSOC., LLP 14200 MIDWAY ROAD, SUITE 122 (972) 385-2272		CONSULTING ENGINEERS DALLAS, TEXAS
DESIGN	DRAWN	DATE
JMB	KPH	APRIL-04
SCALE	NOTES	FILE
1"=20'	JMB	T-1

