SHEET NO.	TOTAL SHEETS
1	12

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

STORM WATER SEWER NO. 366

IN

AUTUMN RIDGE 2ND ADDITION

AND

AUTUMN RIDGE ADDITION

CITY OF WICHITA PROJECT NO. 468-76-245-81855-000-000-001

INDEX #601047

INDEX OF SHEETS

1. TITLE SHEET
2. PLAT-AUTUMN RIDGE ADDITION
3. PLAT-AUTUMN RIDGE 2ND ADDITION
4.-6. STORM WATER SEWER PLAN/PROFILE
7. REINFORCED CONCRETE HEADWALL DETAILS
8. REINFORCED CONCRETE MANHOLE DETAILS
9. STANDARD TYPE 1A CURB INLET DETAILS (L=11'-4")
10. STANDARD TYPE 1A CURB INLET DETAILS (L=8'-4")
11. STANDARD MANHOLE FRAME AND COVER DETAILS
12. DITCH IMPROVEMENTS

PROJECT SURVEY CONTROL

PROJECT DATUM : CITY OF WICHITA DATUM

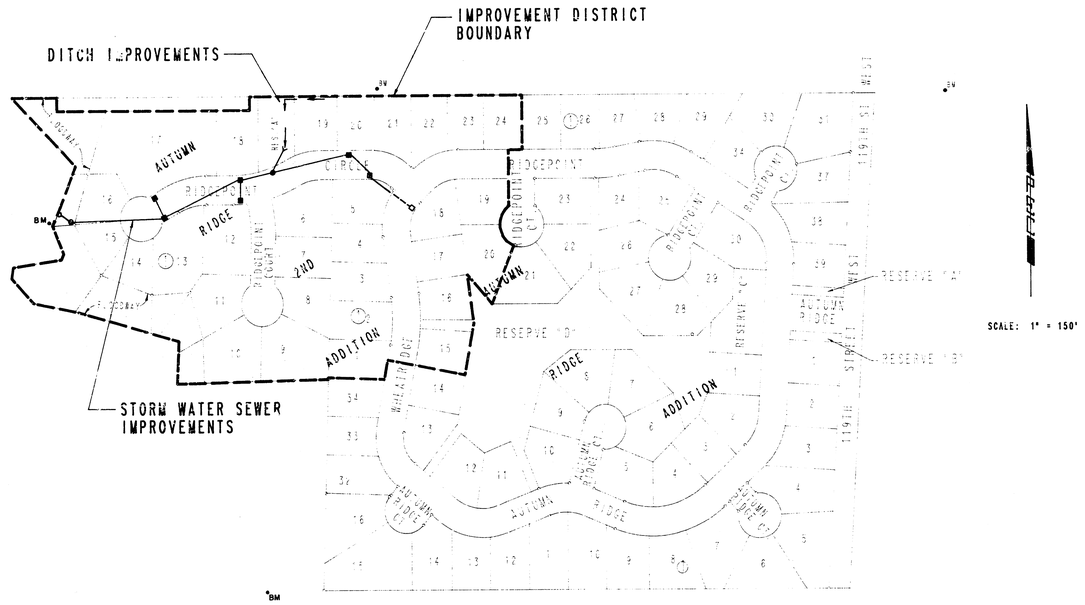
DATUM BENCH MARK: CITY OF WICHITA BENCH MARK DISC 1/2 MILE EAST OF 119TH STREET WEST AND 13TH STREET, DUE NORTH OF 1/4 SECTION CORNER, 8'± NORTH OF H-L POLE (E-W) AND 40.6' NORTH OF CENTERLINE 13TH STREET. ELEV. = 158.73

BENCH MARK: CHISELED "O" IN NORTH CURB 17TH STREET AT 119TH STREET WEST, 2 CURB JOINTS EAST OF EAST RETURN. ELEV. = 164.73

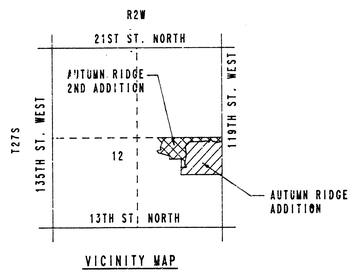
BENCH MARK: P.C., BACK OF NORTH CURB ON OLD WICK ROAD, 127.45' WEST OF SOUTHWEST CORNER OF AUTUMN RIDGE ADDITION. ELEV. = 158.17

BENCH MARK: RR SPIKE IN SOUTH FACE POWER POLE 13' EAST AND 29' NORTH OF THE NORTHEAST CORNER OF LOT 20 BLOCK 1, AUTUMN RIDGE 2ND ADDITION ELEV.=156.86

BENCH MARK: RR SPIKE IN ROOT OF 14" MULBERRY ON SOUTH SIDE, 45' NORTHWEST OF INTERSECTION OF NORTH PROPERTY LINE OF LOT 15, BLOCK 1, AUTUMN RIDGE 2ND ADDITION AND THE FLOODWAY BOUNDARY. ELEV.=149.37



SCALE: 1" = 150'



VICINITY MAP

GENERAL NOTES

1. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
2. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.
3. CONTRACTOR SHALL SATISFY HIMSELF OF SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION.
4. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
5. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
7. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

SOUTHWESTERN BELL TELEPHONE COMPANY	1-316-571-2611
CABLEVISION	262-4270 OR 263-2061
KPL GAS SERVICE	263-7511
KANSAS GAS & ELECTRIC	264-1141
CITY OF WICHITA WATER DEPARTMENT	268-4308
CITY OF WICHITA SEWER DEPARTMENT	268-4071
ARKLA GAS COMPANY	942-8350 OR 263-8161
RURAL WATER DISTRICT NO. 4	796-1100

8. DITCH IMPROVEMENTS AS SHOWN ON SHEET NO. 12 SHALL BE SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH C.O.W. SPECIFICATIONS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO OTHER ITEMS.

As Builts (Not Measured) 12/7/88 MG

REVISED - SEPT 12, 88

CHARLES S. BROWN LICENSED 7581 KANSAS PROFESSIONAL ENGINEER

AUGUST, 1988

PLANS PREPARED BY

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS

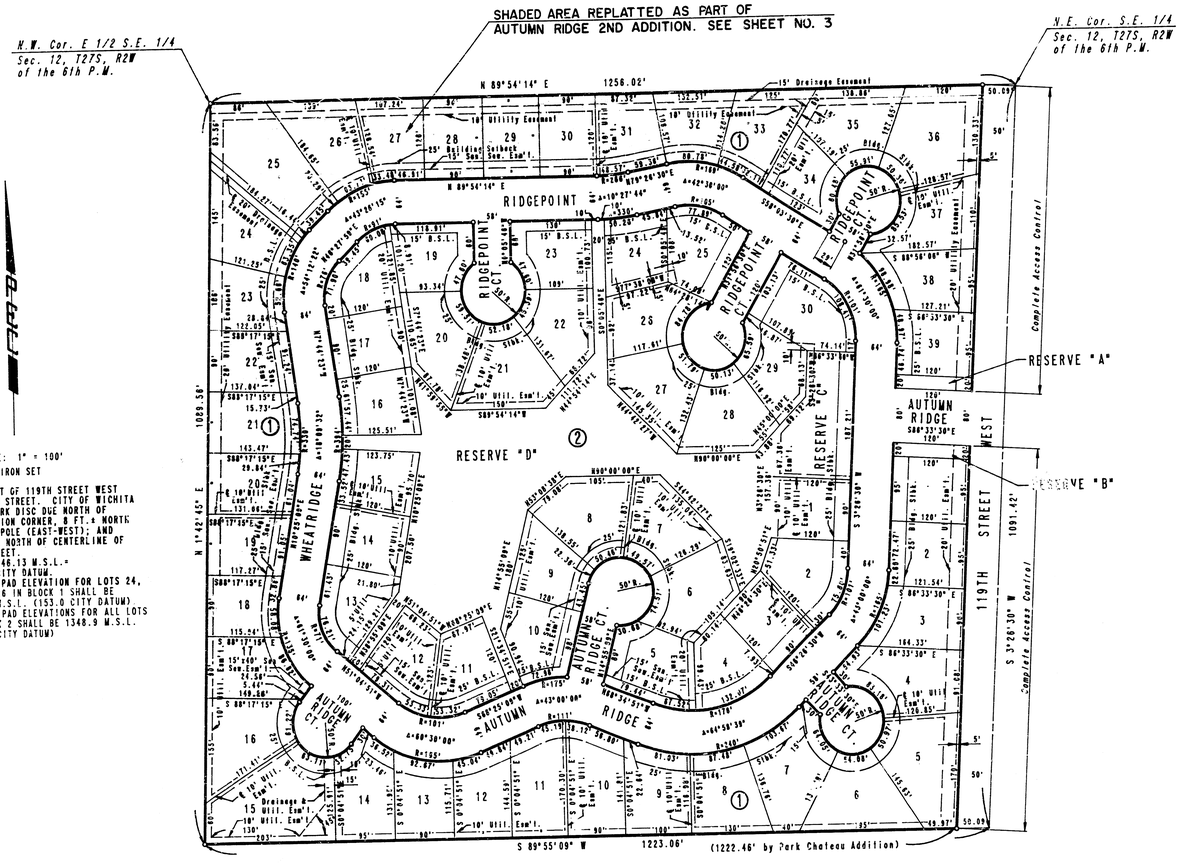
WICHITA, KANSAS

1/12

PROJECT NO.	SHEET NO.	TOTAL SHEETS
4GB-76-245-81855-000-000-001	2	12

AUTUMN RIDGE

TO WICHITA, SEDGWICK COUNTY, KANSAS



SCALE: 1" = 100'

o = IRON SET

B.M. - 1/2 EAST OF 119TH STREET WEST AND 13TH STREET, CITY OF WICHITA BENCH MARK DISC DUE NORTH OF 1/4 SECTION CORNER, 8 FT.± NORTH OF H.L. POLE (EAST-WEST); AND 40.6 FT. NORTH OF CENTERLINE OF 13TH STREET.
ELEV.=1346.13 M.S.L.= 158.73 CITY DATUM.
MINIMUM PAD ELEVATION FOR LOTS 24, 25 AND 26 IN BLOCK 1 SHALL BE 1340.4 M.S.L. (153.0 CITY DATUM)
MINIMUM PAD ELEVATIONS FOR ALL LOTS IN BLOCK 2 SHALL BE 1348.9 M.S.L. (161.5 CITY DATUM)

Storm Water Sewer No. 366

PLAT

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

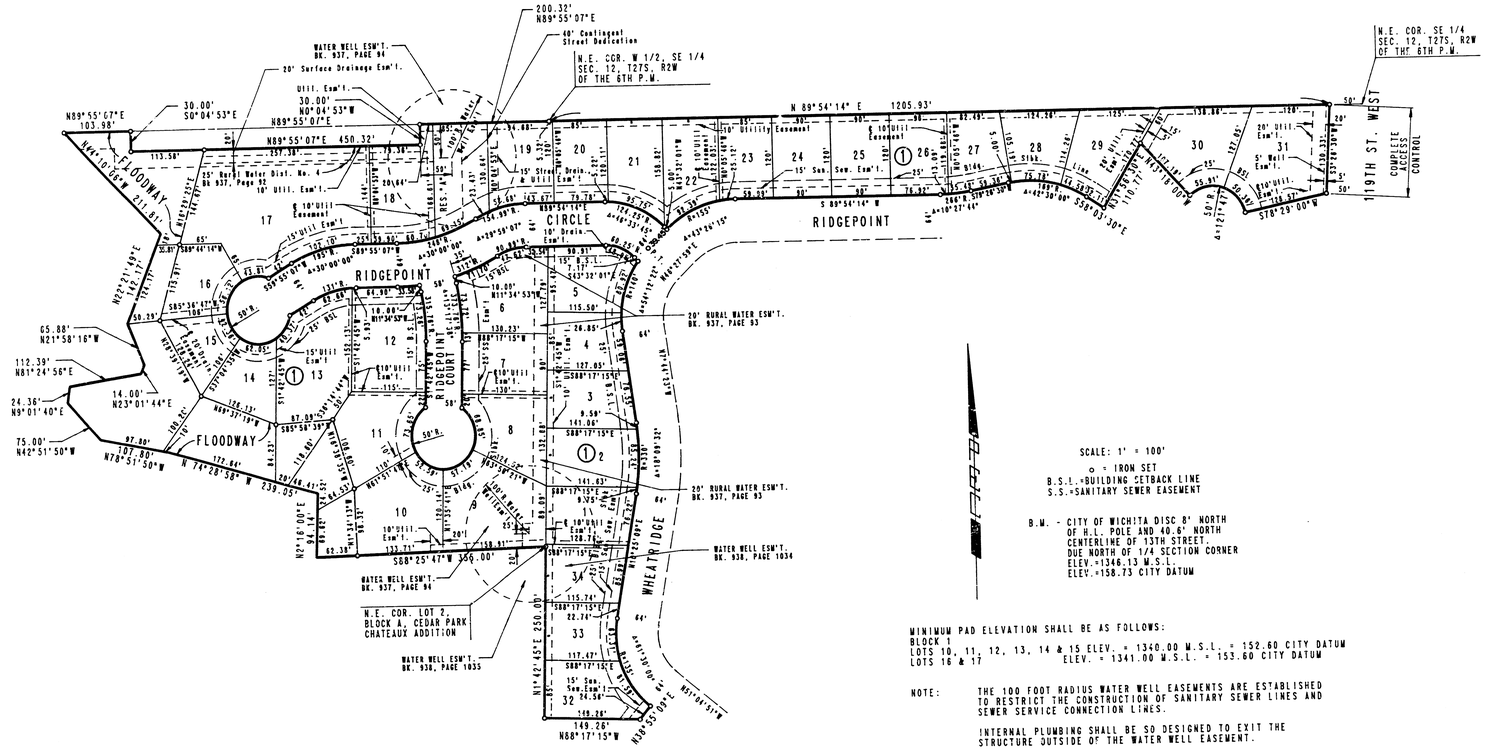
2/12

Designed by		Checked by	
Drawn by	DEP	Date MAY, 1988	Job No. 88155-1

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81855-000-000-001	3	12

AUTUMN RIDGE 2ND ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS



MINIMUM PAD ELEVATION SHALL BE AS FOLLOWS:
BLOCK 1
LOTS 10, 11, 12, 13, 14 & 15 ELEV. = 1340.00 M.S.L. = 152.60 CITY DATUM
LOTS 16 & 17 ELEV. = 1341.00 M.S.L. = 153.60 CITY DATUM

NOTE: THE 100 FOOT RADIUS WATER WELL EASEMENTS ARE ESTABLISHED TO RESTRICT THE CONSTRUCTION OF SANITARY SEWER LINES AND SEWER SERVICE CONNECTION LINES.

INTERNAL PLUMBING SHALL BE SO DESIGNED TO EXIT THE STRUCTURE OUTSIDE OF THE WATER WELL EASEMENT.

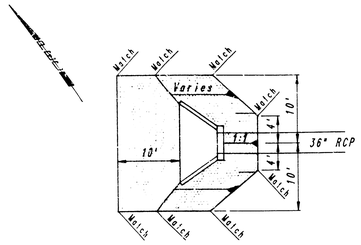
Storm Water Sewer No. 366

PLAT

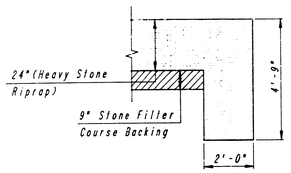
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

3/12

Designed by		Checked by		
Drawn by	DEP	Date	JUNE, 1988	Job No. 88155-1



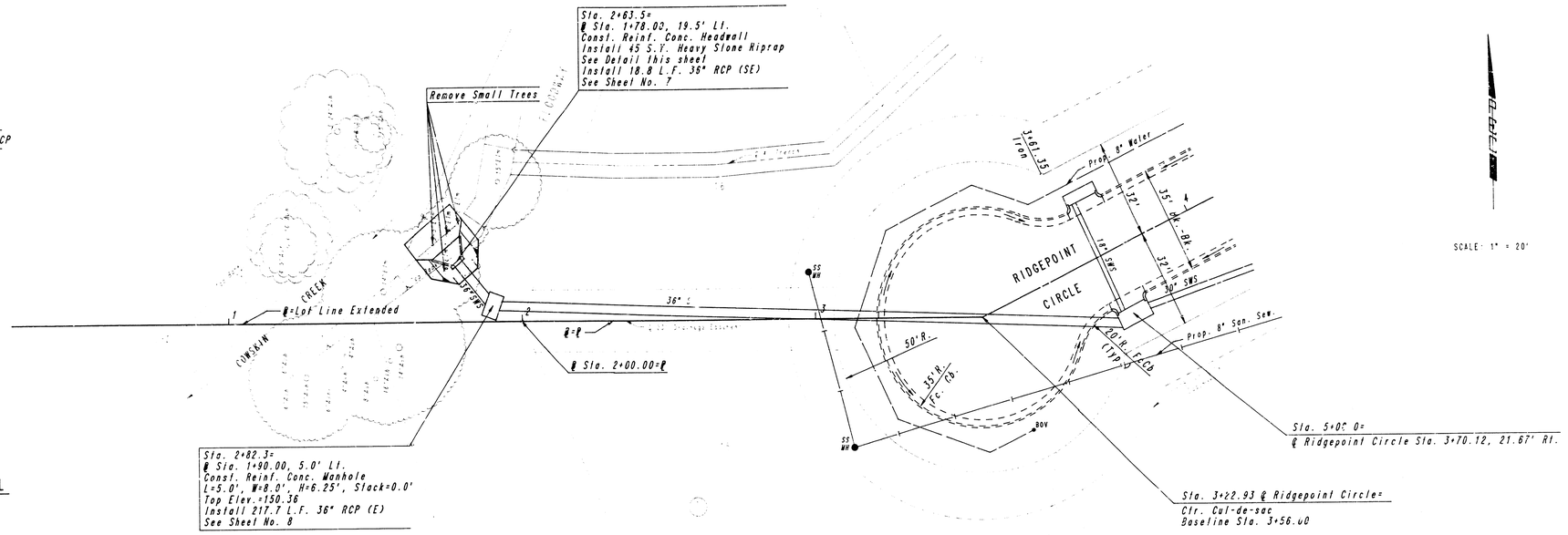
RIPRAP PLAN
SCALE: 1" = 10'



TYPICAL SECTION THRU TOEWALL
NO SCALE

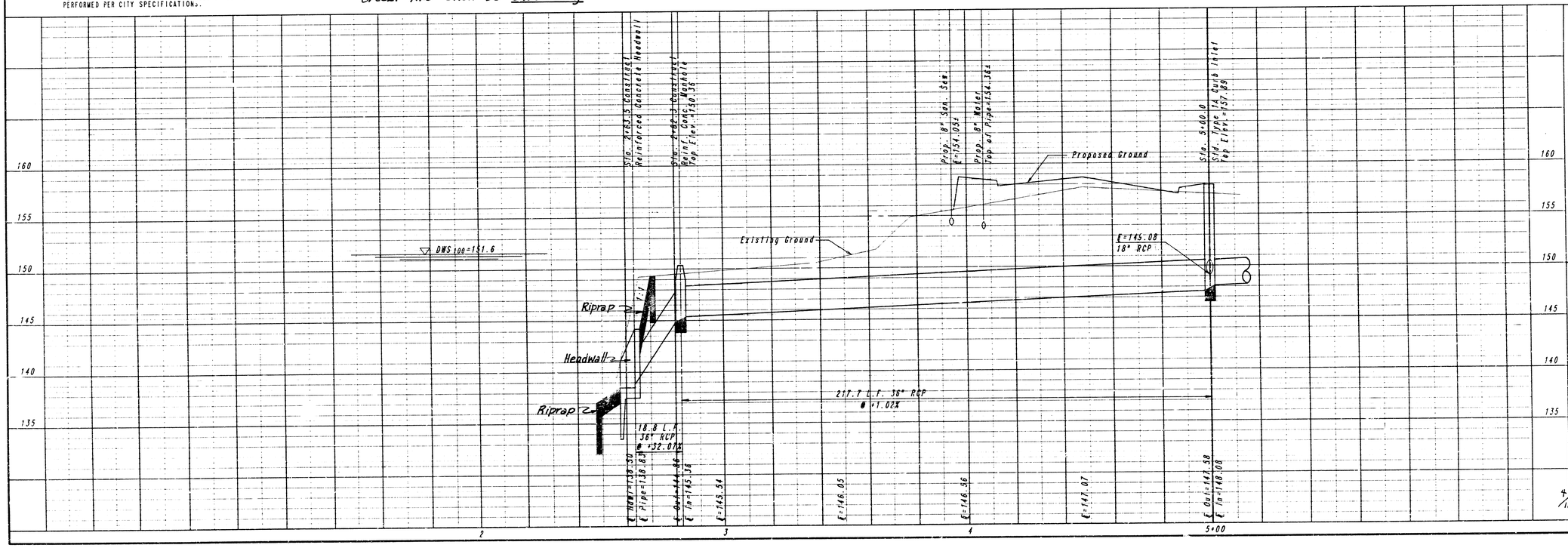
NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL UNPROTECTED EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.



SCALE: 1" = 20'

Note: The Contractor shall install a cofferdam or other approved facilities to insure proper installation of the riprap below the water surface of the creek. This shall be subsidiary.



AUTUMN RIDGE 2ND ADDITION
STORM WATER SEWER NO. 156

S.W.S. IMPROVEMENTS
STA. 2+63.5 TO STA. 5+00.0

C.O.W. PROJECT NO. 468-76-245-51855-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

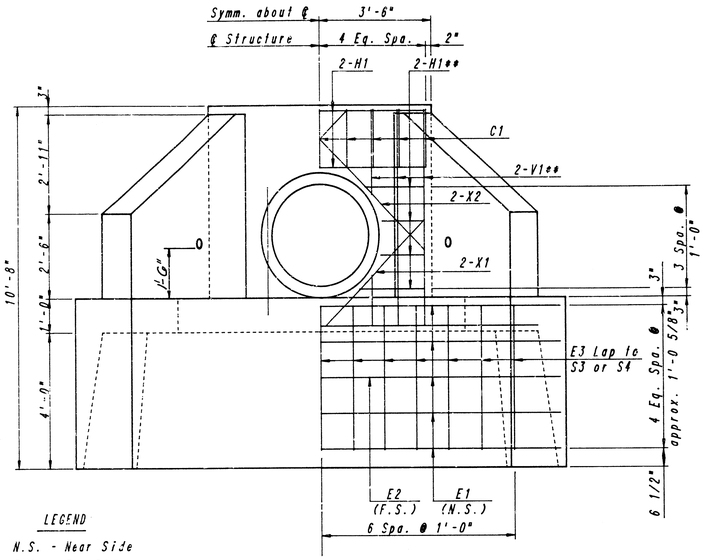
Designed By CSB, GDD | Job No. 32-88155-1
Drawn By DEP | Date AUG., 1988

4/12

Sheet 4 of 12

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81855-000-000-001	7	12

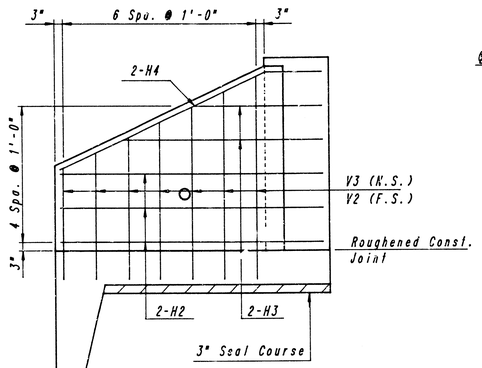
** Field Cut to allow 2" clr. to Pipe



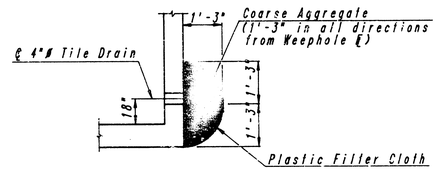
LEGEND

N.S. - Near Side
F.S. - Far Side

ELEVATION

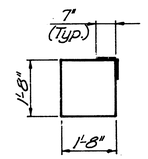


DEVELOPED WING ELEVATION

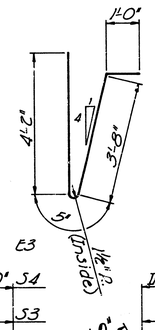


WALL WEEPHOLE DETAIL

(Typical-2 Required)



C1



BILL OF MATERIALS

REINFORCING STEEL

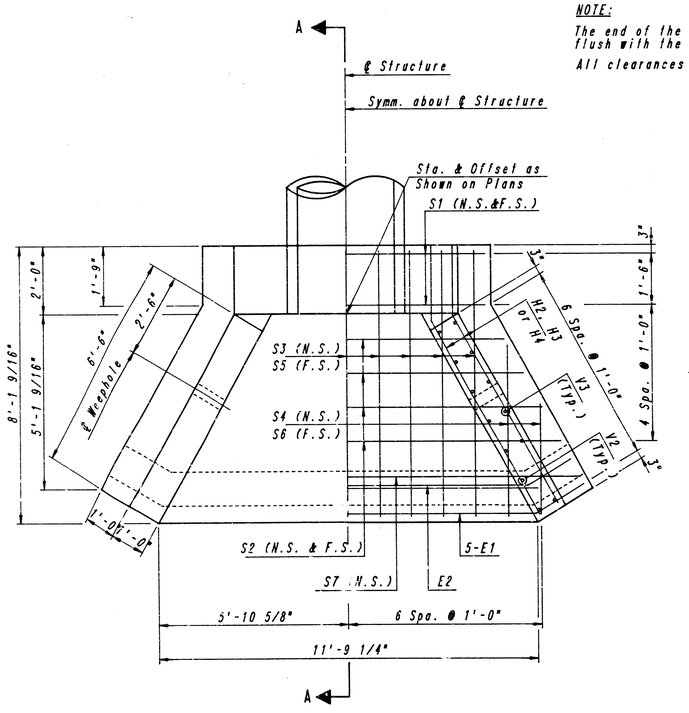
Mark	No.	Size	Length	Mark	No.	Size	Length
S1	4	#6	8'-8"	S3	9	#6	9'-3"
S2	3	#6	*	S4	4	#6	*
S5	9	#6	7'-9"				
S6	4	#6	*	E1	5	#4	14'-11"
S7	1	#6	14'-6"	E2	1	#4	13'-10"
				E3	13	#4	9'-3"
V1	12	#5	6'-4"				
V2	14	#5	*	H2	12	#4	8'-1"
V3	14	#6	*	H3	8	#4	*
				H4	4	#6	8'-9"
H1	12	#4	6'-8"				
				C1	9	#4	7'-10"
X1	4	#6	4'-6"				
X2	4	#6	5'-6"				

*** SUMMARY OF QUANTITIES		
Item	Quantity	Unit
Class AAA Concrete (AE)	10.0	C.Y.
Reinforcing Steel (Gr. 60)	1190	Lbs.
Seal Course (Cl. A Conc.)	0.7	C.Y.

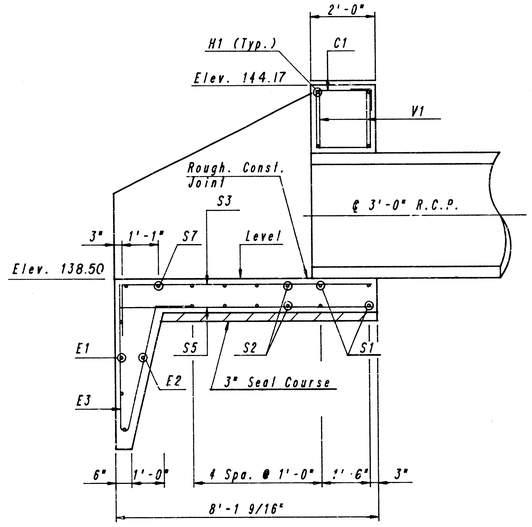
* See Banding Diagrams.
*** For Information Only.

NOTE:

The end of the Pipe shall be cut flush with the Headwall Face.
All clearances shall be 2" unless noted.



PLAN



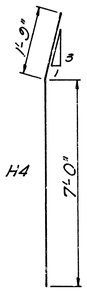
SECTION A-A

Incr. from 3'-0" to 4'-9" by 1'-0" S4
Cut 2 Each Length
7'-9" S3
1'-6"

Incr. from 2'-5" to 4'-8" by 2'-3" H3
Cut 4 Each Length
6'-4" H2
1'-9"
30°

Incr. from 3'-3" to 6'-0" by 5½" V2 & V3
Cut 2 Each Length
Incr. from 3'-0" to 4'-9" by 1'-9" S6
Cut 2 Each Length
Incr. from 9'-9" to 13'-3" by 1'-2" S2
Cut 2 Each Length

E2 11'-2"
E1 11'-7"
30°
E1 1'-8" (Typ.)
E2 1'-4" (Typ.)



CONCRETE HEADWALL NOTES

REINFORCING STEEL: ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS OTHERWISE NOTED. REINFORCING STEEL SHALL COMPLY TO A.S.T.M. DESIGNATION A615 GRADE 60.

CONCRETE: CLASS A CONCRETE AND CLASS AAA CONCRETE (AE) SHALL COMPLY TO "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", KANSAS DEPARTMENT OF TRANSPORTATION, EDITION 1980, SECTION 402. BEVEL ALL EXPOSED EDGES WITH A 3/4" TRIANGULAR MOLDING OR FINISH WITH AN APPROVED EDGING TOOL. A SEAL COURSE CONSISTING OF CLASS A CONCRETE SHALL BE PLACED AS SHOWN ON THE PLANS.

MEASUREMENT AND PAYMENT: THE "REINFORCED CONCRETE HEADWALL" SHALL BE BID LUMP SUM WHICH SHALL INCLUDE ALL LABOR, MATERIAL, EXCAVATION, CONCRETE, SEAL COURSE, REINFORCING STEEL AND ALL OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK. QUANTITIES ARE FOR INFORMATION ONLY.

BENDING DIAGRAMS

All dimensions are out to out unless otherwise noted.

AUTUMN RIDGE 2ND ADDITION

REINF. CONC. HEADWALL DETAILS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by	RAS	Checked by	R.A.S.	7/12
Drawn by	M.L.L.	Date	JULY 1988	Job No. 88155-1

℄ Ridgepoint Circle Sta. 3+70.12, 20.67' Lt.
Const. Std. Type 1A Curb Inlet
(L=11'-4", W=4'-4")
Top Elev.=157.89
℄ Out=150.35
See Sh. No. 9

Sta. 3+22.93 ℄ Ridgepoint Circle=
Cir. Cul-de-sac

℄ Street Curve Data
Δ=30°00'00"
D=35°09'03"
R=163.00'
T=43.68'
L=85.35'
E=5.75'

Sta. 5+00.0
℄ Ridgepoint Circle Sta. 3+70.12, 21.67' Rt.
Const. Std. Type 1A Curb Inlet
(L=11'-4", W=6'-4")
Top Elev.=157.89
Install 200.9 L.F. 30" RCP(S)
Install 42.3 L.F. 18" RCP(S)
℄ In=149.08 (18")
See Sh. No. 9

℄ Ridgepoint Circle Sta. 5+76.00, 20.67' Rt.
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=4'-4")
Top Elev.=157.99
℄ Out=152.41
See Sh. No. 10

Sta. 7+00.9
℄ Ridgepoint Circle Sta. 5+75.51, 21.17' Lt.
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=5'-4")
Top Elev.=157.99
Install 80.0 L.F. 30" RCP(E)
Install 41.8 L.F. 18" RCP(S)
℄ In=151.57 (18")
See Sh. No. 10

℄ Street Curve Data
Δ=30°00'00"
D=20°27'46"
R=280.00'
T=75.03'
L=146.61'
E=9.88'

Sta. 6+09.80 ℄ Ridgepoint Circle=
Sta. 20+00.00 ℄ Ridgepoint Court

Denotes revised items

SCALE: 1" = 20'

NO.	REVISION	DATE	BY
1	Revised Pipe Size & ℄ Sta. 7+00.9 to Sta. 7+80.9	9/12/88	CSB

AUTUMN RIDGE 2ND ADDITION
STORM WATER SEWER NO. 366

S.W.S. IMPROVEMENTS
STA. 5+00.0 TO STA. 7+00.9

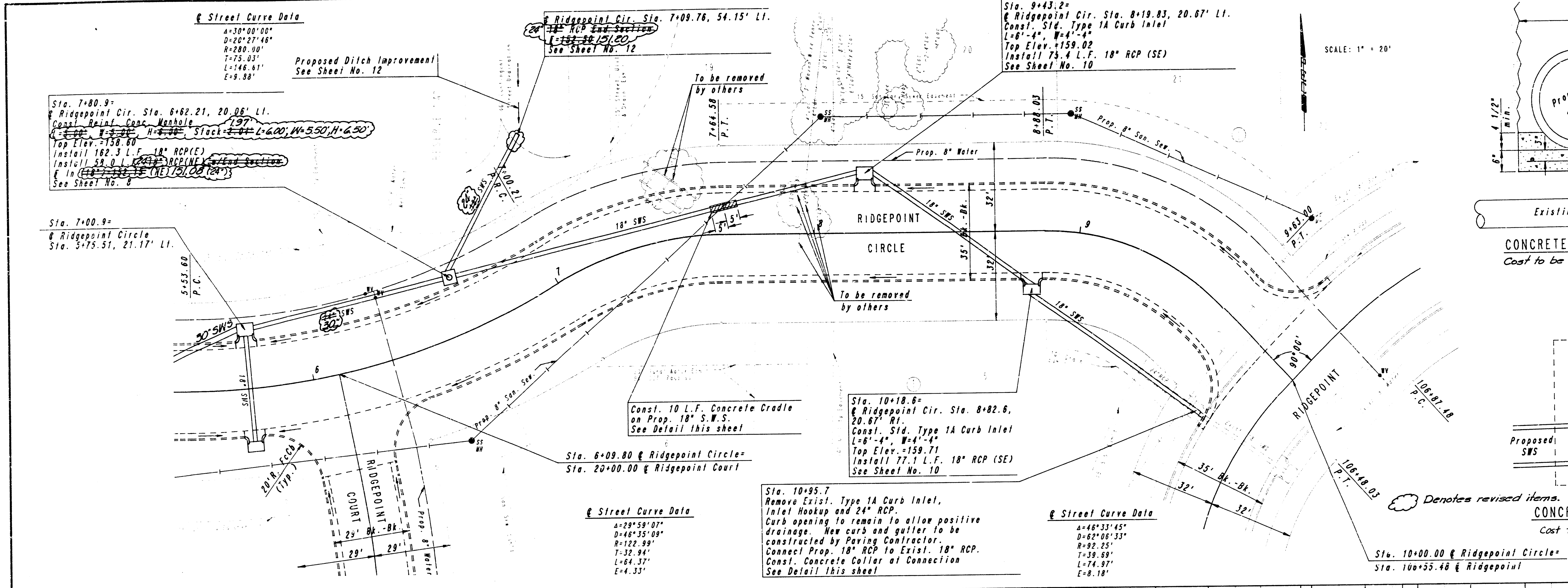
C.O.W. PROJECT NO. 468-76-245-81855-000-000-001

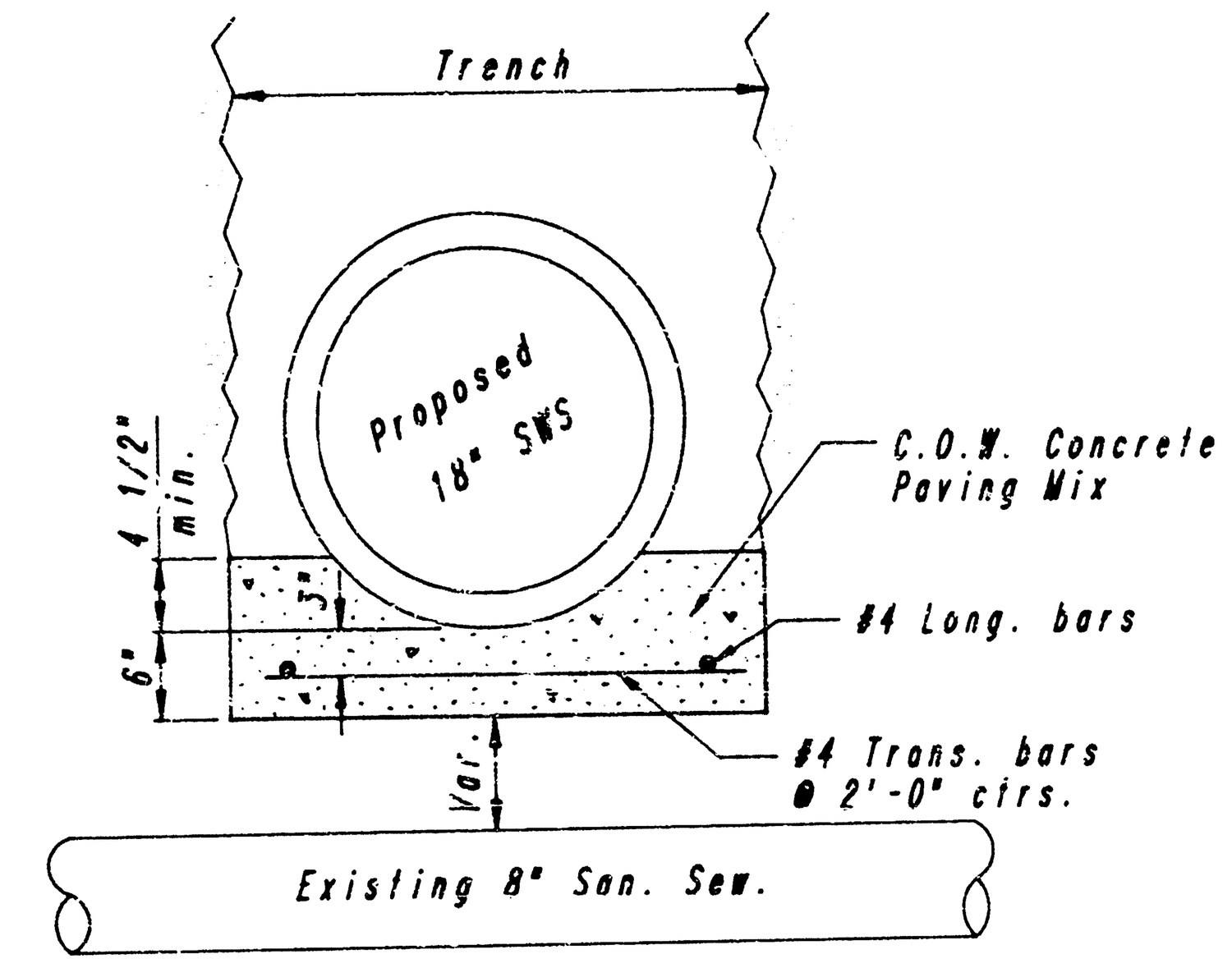
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Job No. 32-88155-1
Date JULY, 1988
Designed By CSB, GDD
Drawn By DEP

5/12

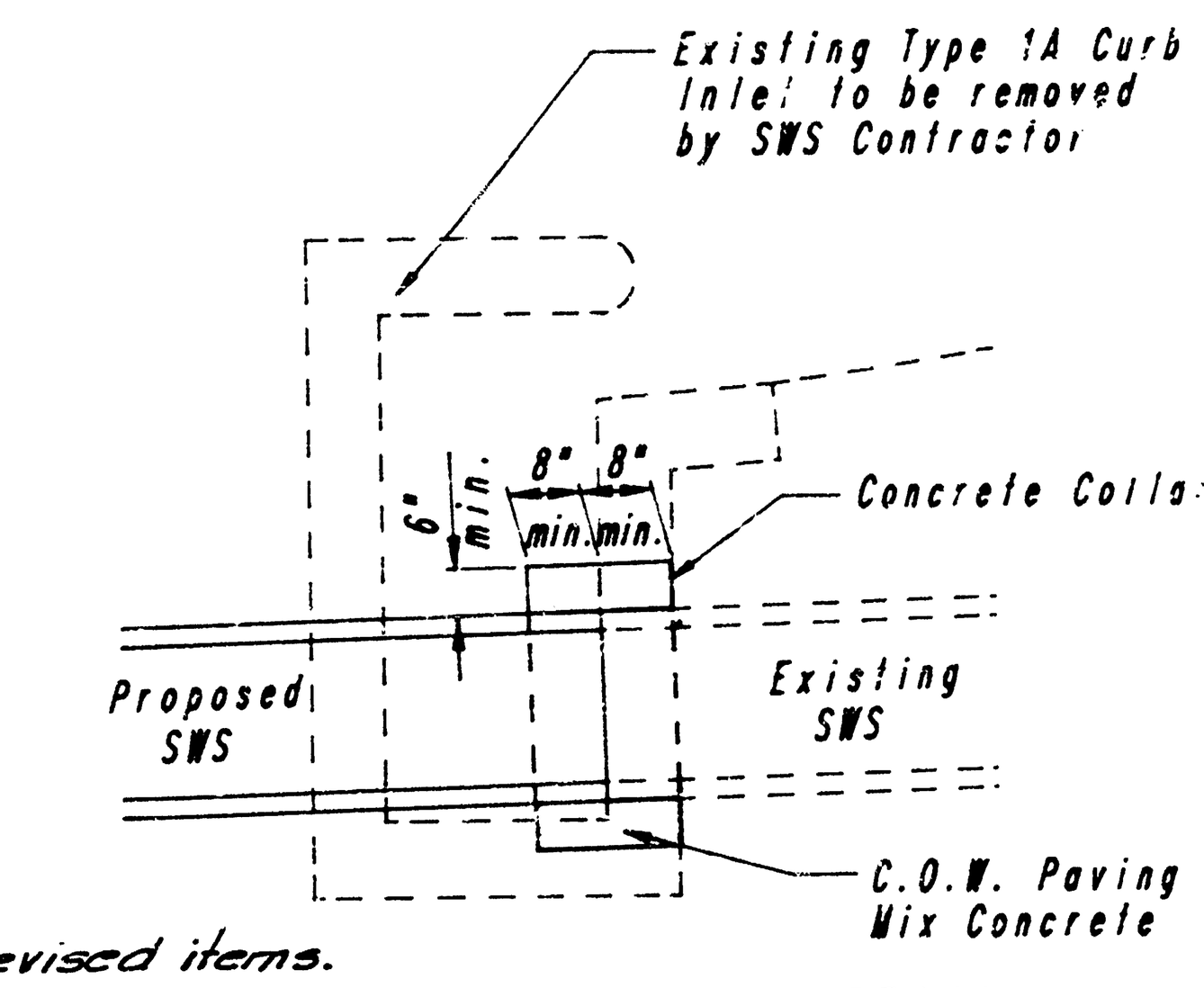
Sheet 5 of 12





CONCRETE CRADLE DETAIL

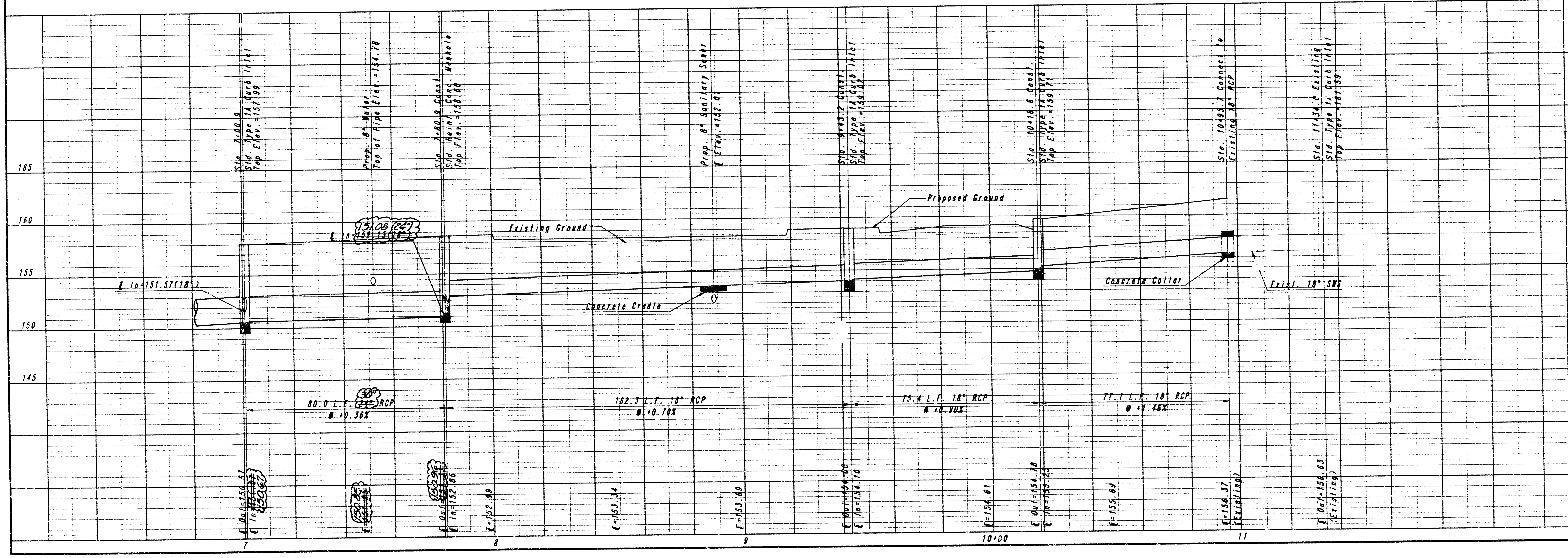
Cost to be subsidiary to pipe.



CONCRETE COLLAR DETAIL

Cost to be Subsidiary to Pipe

NO.	REVISION	DATE	BY
1	Revised pipe sizes & IE's Sta. 7+00.9 to Sta. 7+80.9 & lateral. Omitted end section.	3/12/88	CSB



AUTUMN RIDGE 2ND ADDITION
STORM WATER SEWER NO. 366

S.W.S. IMPROVEMENTS

STA. 7+00.9 TO STA. 10+95.7

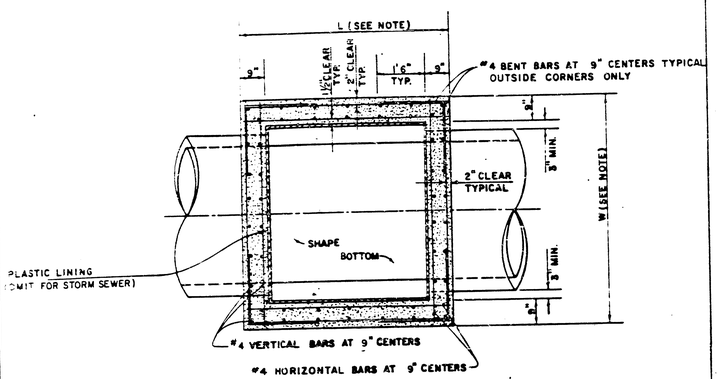
C.O.W. PROJECT NO. 468-76-245-81855-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

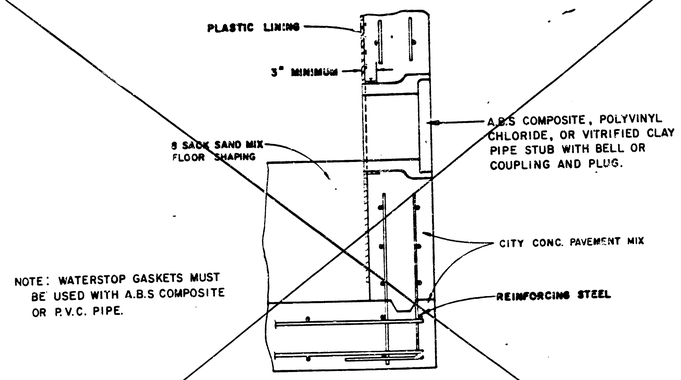
Designed By CSB, GDD | Job No. 32-88155-1
Drawn By DEP | Date AUG., 1988

6/12

Sheet 6 of 12

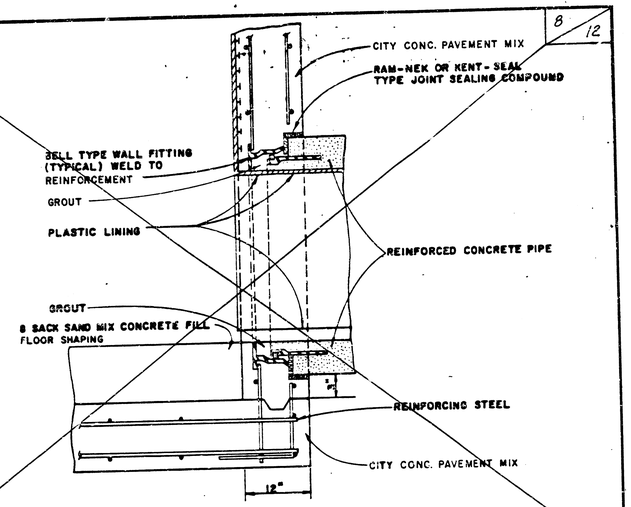


TOP VIEW

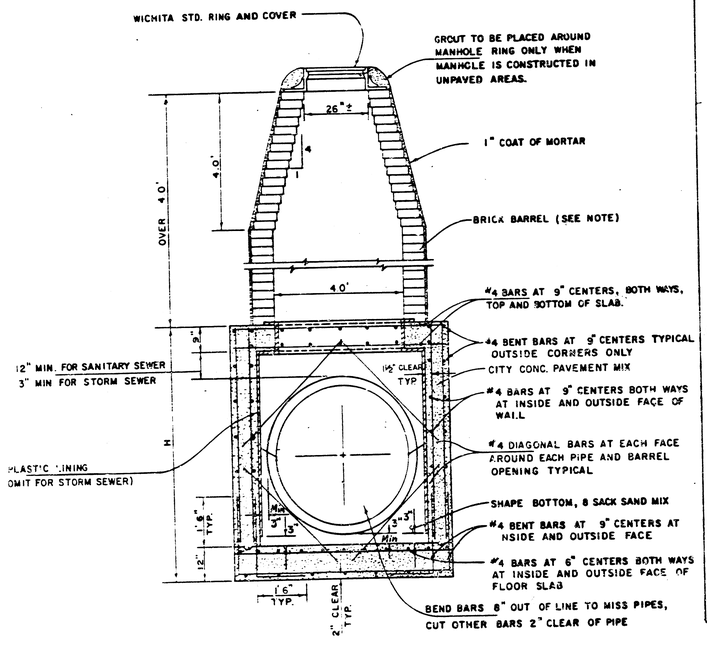


NOTE: WATERSTOP GASKETS MUST BE USED WITH A.B.S COMPOSITE OR P.V.C. PIPE.

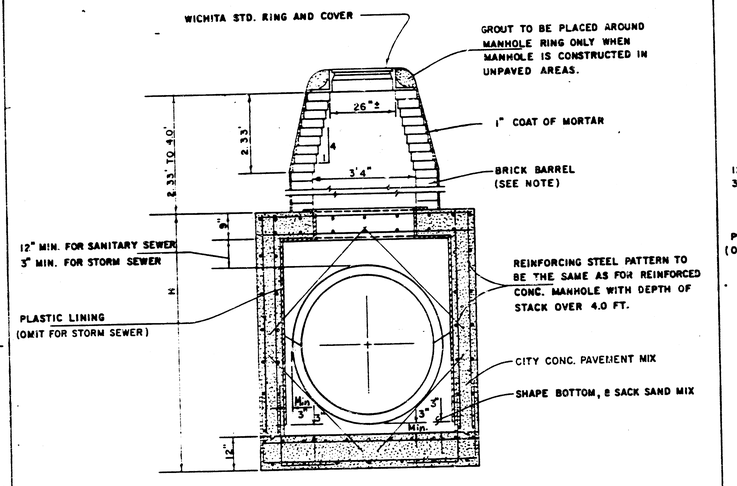
PIPE STUB DETAIL
SANITARY SEWER ONLY



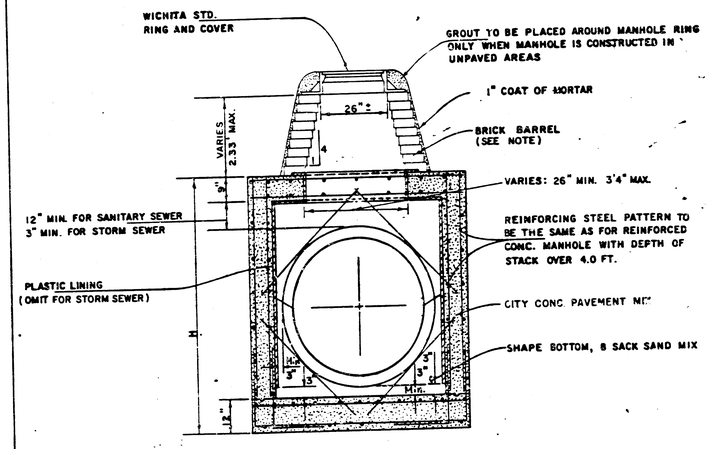
R.C.P. CONNECTION DETAIL
SANITARY SEWER ONLY



REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: OVER 4.0'
SCALE 1" = 2'



REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 2.33' TO 4.0'
SCALE 1" = 2'



REINFORCED CONCRETE MANHOLE
DEPTH OF STACK: 0' TO 2.33'
SCALE 1" = 2'

NOTE :
BRICK BARRELS LESS THEN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12" BRICK BARRELS MORE THEN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5'6" FOR BRICK BARRELS WITH 8" WALLS AND 6'2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FT. IN HEIGHT. COMLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATERTIGHT.

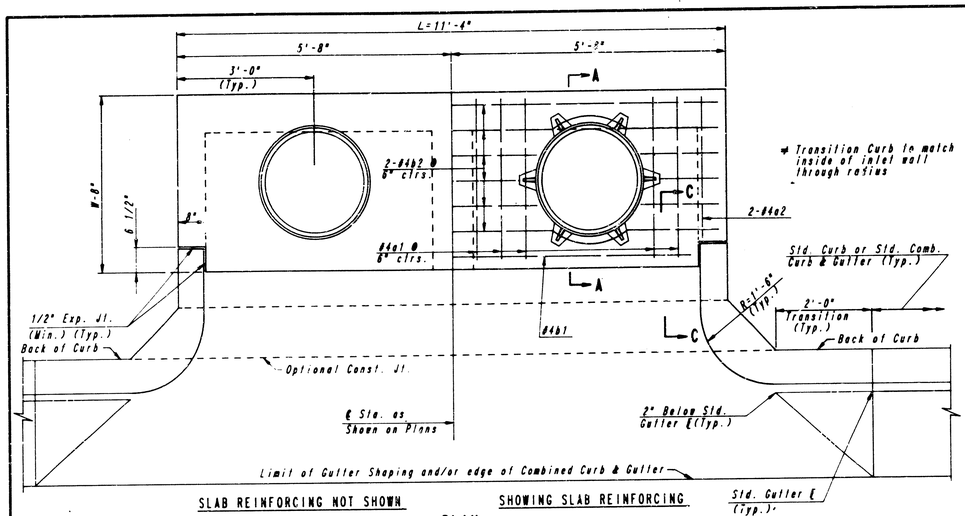
REVISIED 1-7-85 Proj. No. 468-76-245-81885-000-000-001

STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA

8/12

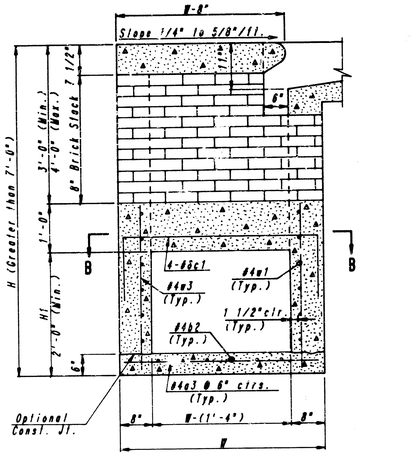
FEBRUARY 1984

PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81855-000-000-001	9	12

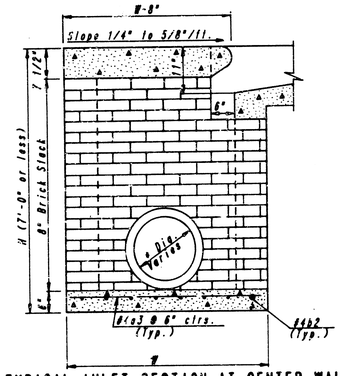


SLAB REINFORCING NOT SHOWN — SHOWING SLAB REINFORCING

PLAN

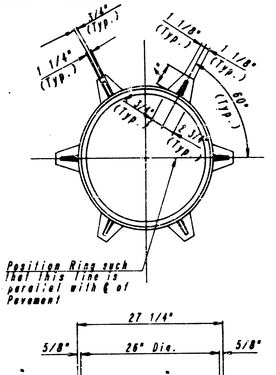


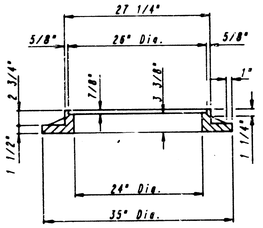
TYPICAL INLET SECTION AT CENTER WALL
(REINFORCED CONCRETE WALLS)



TYPICAL INLET SECTION AT CENTER WALL
(MASONRY WALLS).

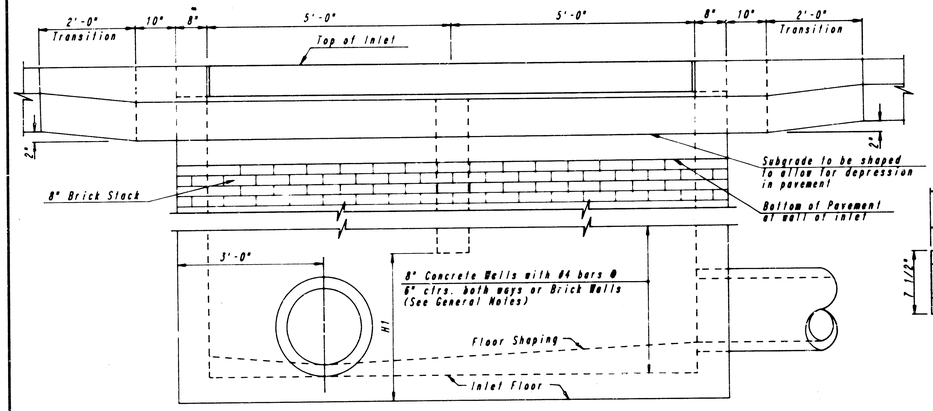
* A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe.



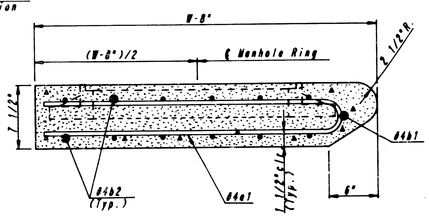


CAST IRON INLET FRAME
Wt.=180 lbs.

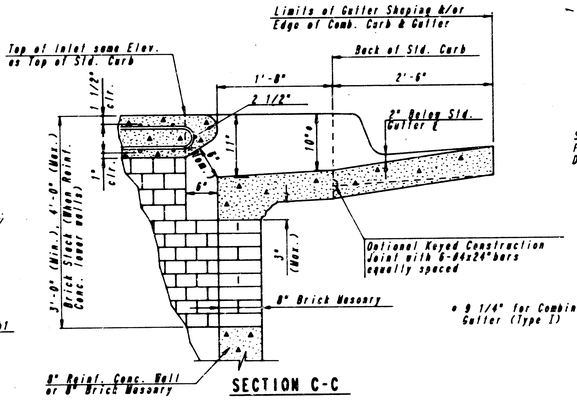
See City of Wichita Standard Manhole Frame and Cover Detail Sheet for Cover Details to be used with Inlet Frame.



ELEVATION

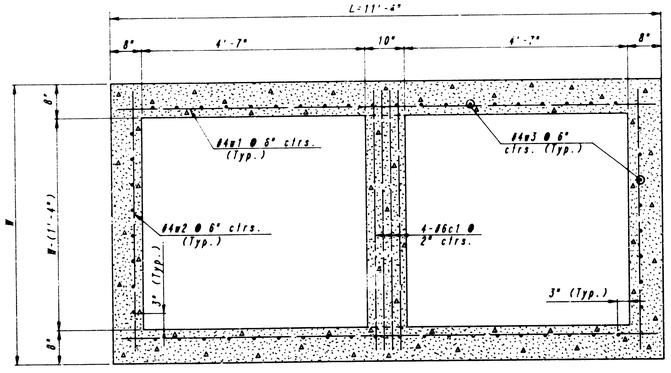


SECTION A-A



* 9 1/4" for Combined Curb & Gutter (Type I)

SECTION C-C



SECTION B-B

SLAB AND FLOOR REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	13	6'-7 1/4"	13	8'-7 1/4"	13	10'-7 1/4"	13	12'-7 1/4"	13	14'-7-1/4"
a2	#4	2	6'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
b1	#4	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"
*b2	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
c1	#6	4	6'-1"	4	7'-1"	4	8'-1"	4	9'-1"	4	10'-1"
w1	#4	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
w3	#4	②	③	②	③	②	③	①	③	②	③

* Field bend or cut Reinforcing as required for clearance
① 4(H1-6")+4 (H1-6") Rounded down to nearest 0.5'
② 40+4(W - 16") ③ H1+(9")

GENERAL NOTES

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=5'-4" OR LESS AND H=7'-0" OR LESS. WHEN W IS GREATER THAN 5'-4" AND W IS LESS THAN 7'-0", THE OUTSIDE WALLS BELOW THE BRICK STACK SHALL BE REINFORCED CONCRETE CONSTRUCTION AND THE CENTER WALL SHALL BE OF MASONRY CONSTRUCTION AS SHOWN FOR THE MASONRY WALL OPTION.

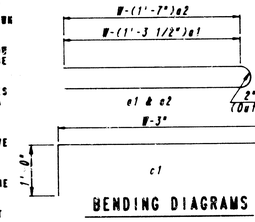
INLET FLOOR SHALL BE SHAPED WITH A SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEARING BETWEEN ALL INLET AND/OR OUTLET PIPES.

CONCRETE SHALL BE CITY OF WICHITA STANDARD PAVING MIX. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. INLET TOPS ARE TO BE PLACED ON A THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE PRECAST OR CAST IN PLACE. INLET TOPS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

UNLESS OTHERWISE NOTED, ALL BARS ARE #4 ON 6" MAX. CENTERS AND SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2". BARS SHALL BE FIELD BENT OR CUT TO CLEAR GARBOLE RINGS AND PIPE OPENINGS.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

ADDITIONAL CURB AND/OR CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR "INLET HOOKUP".



BENDING DIAGRAMS

CITY OF WICHITA, KANSAS

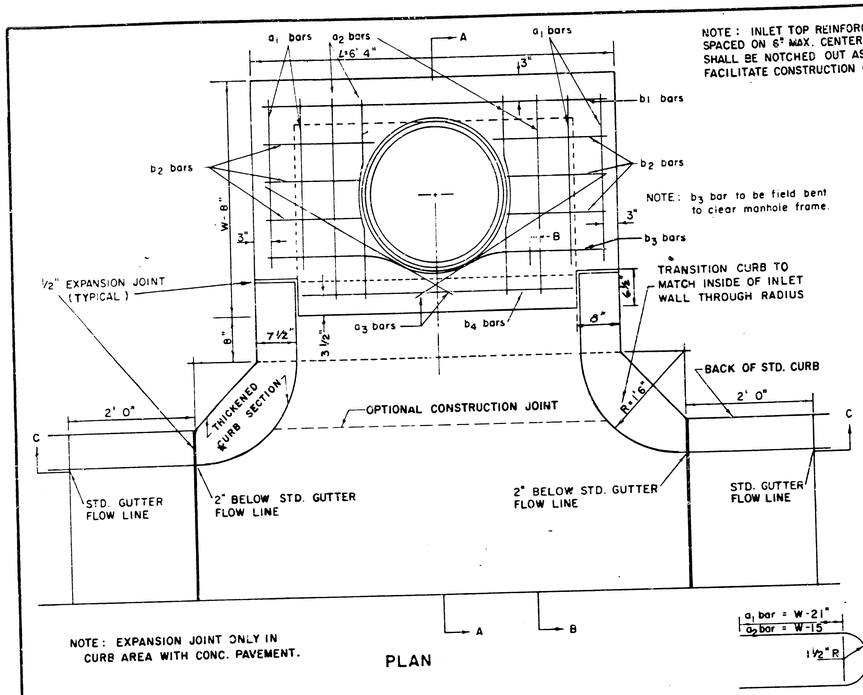
DETAIL STANDARD TYPE IA CURB INLET

INLET OPENING = 8"X10'-8" (L=11'-4")

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

9/12

Designed by		Checked by	
Drawn by		Date	Job No.

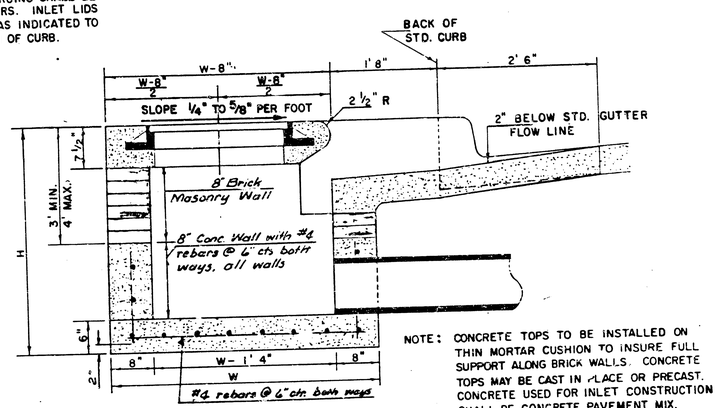


NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

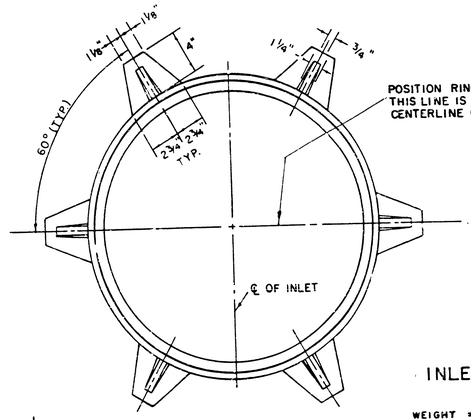
NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: b_3 bar to be field bent to clear manhole frame.



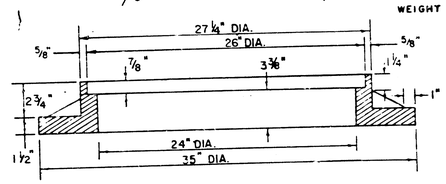
SECTION A-A

NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.



INLET FRAME

WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

BENDING DIAGRAM

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

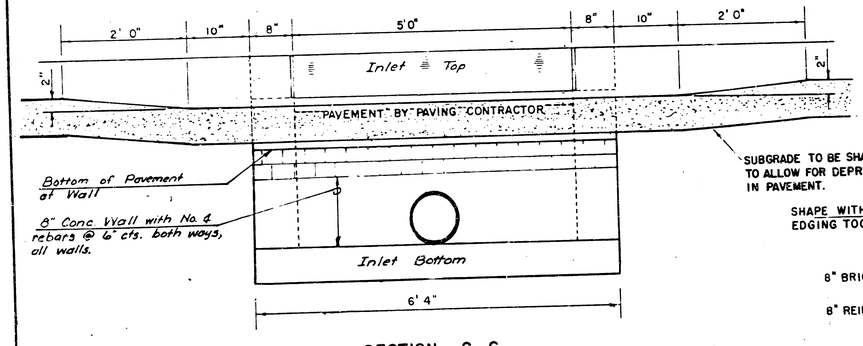
THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

STEEL SCHEDULE

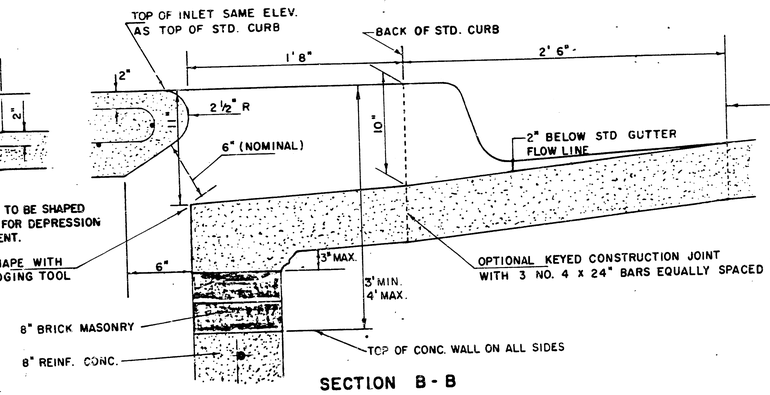
BAR		a_1	a_2	a_3*	b_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'4"	5'7"	6'7"	4'0"	6'1"	–	–	–	–	1'9"	6'2"	4'8"	60±
	W=5'4"	7'7"	8'7"	5'0"	–	6'1"	–	–	–	1'9"	6'2"	4'8"	81±
	W=6'4"	9'7"	10'7"	6'0"	–	–	6'1"	–	–	1'9"	6'2"	4'8"	101±
	W=7'4"	11'7"	12'7"	7'0"	–	–	–	6'1"	–	1'9"	6'2"	4'8"	121±
	W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6'1"	1'9"	6'2"	4'8"	141±

* NOTE: c_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3'8" x 6'4" x 7½"	21" & SMALLER	0.38 ±
5' 4"	4'8" x 6'4" x 7½"	24" & 30"	0.51 ±
6' 4"	5'8" x 6'4" x 7½"	36" & 42"	0.64 ±
7' 4"	6'8" x 6'4" x 7½"	48" & 54"	0.77 ±
8' 4"	7'8" x 6'4" x 7½"	60" & 66"	0.90 ±



SECTION C-C



SECTION B-B

REVISED 12-21-1984 Proj. No. 468-76-245-81855-000-000-001

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"
(L=6'-4")

JUNE 1984

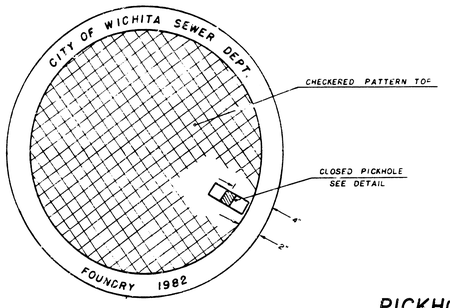
10/12

MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN
BY
City of Wichita, Kansas

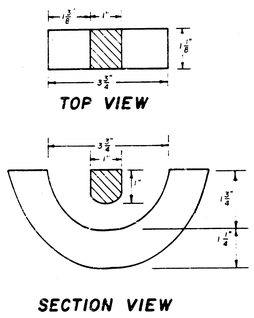
MANHOLE COVER

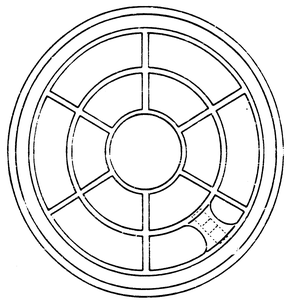
Weight: 180 Lbs.



TOP VIEW

PICKHOLE DETAIL

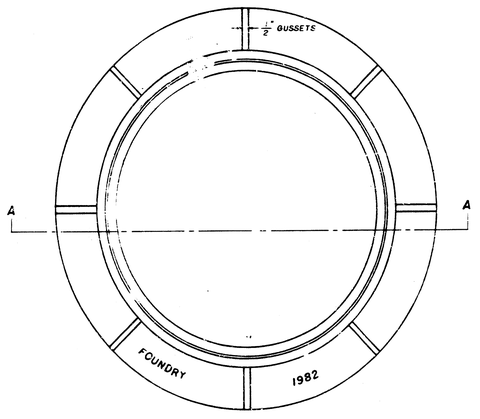




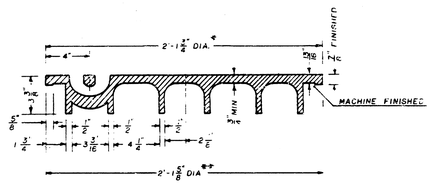
BOTTOM VIEW

MANHOLE FRAME

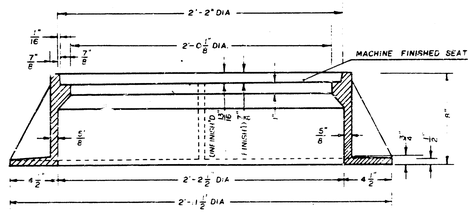
Weight: 240 Lbs.



TOP VIEW



SECTION VIEW



SECTION A-A

* OUTSIDE DIA TOP OF COVER
** OUTSIDE DIA BOTTOM OF COVER

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

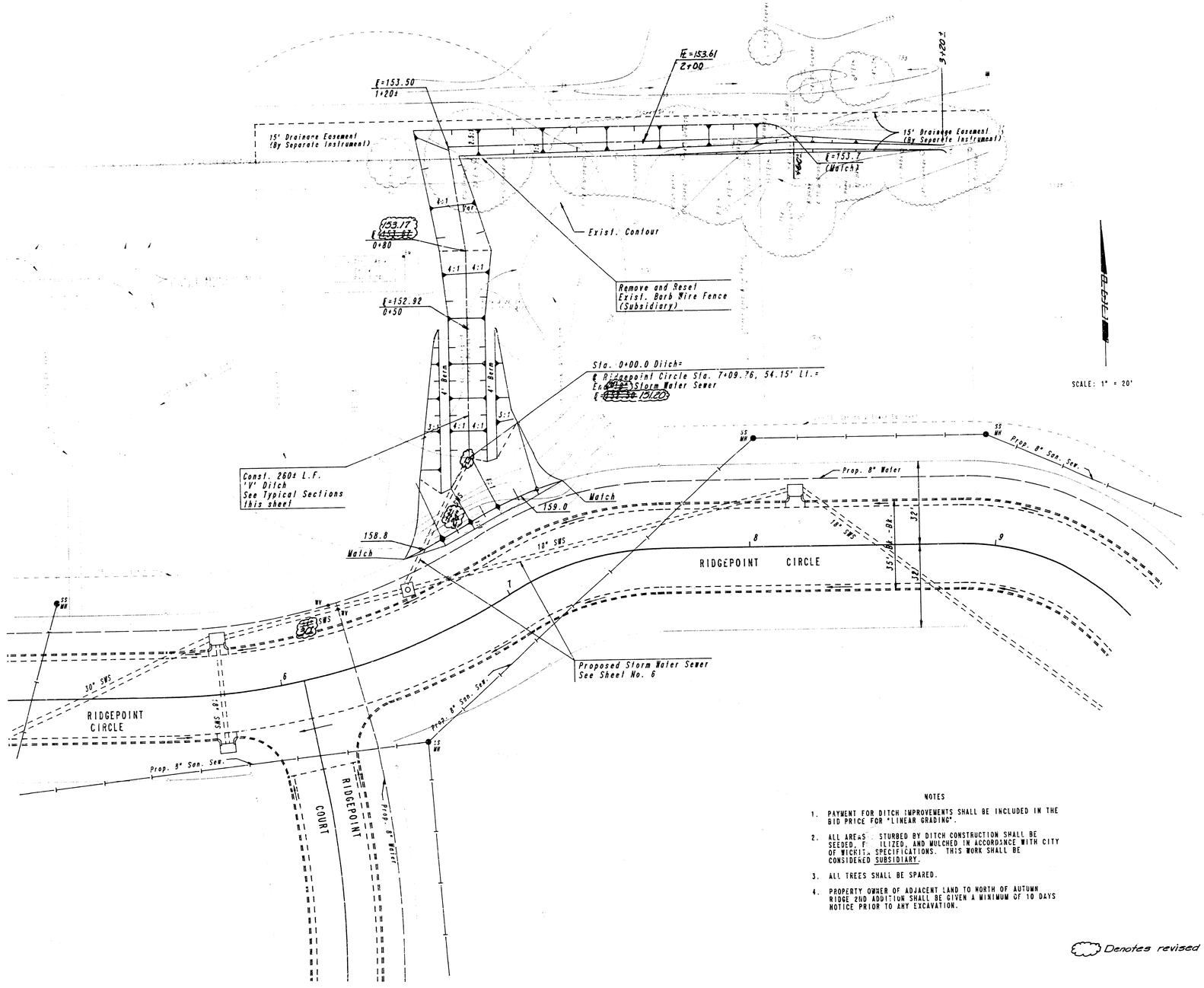
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

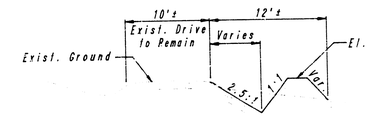
5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

Proj. No. 468-76-245-81855-000-000-001

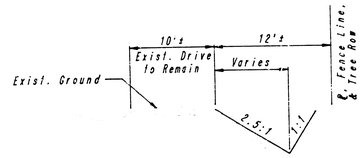
PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-81855-000-000-001	12	12



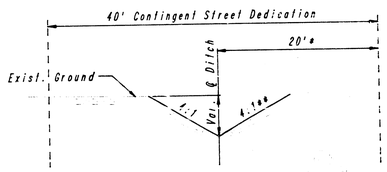
SCALE: 1" = 20'



TYPICAL SECTION
STA. 2+00 TO STA. 3+20

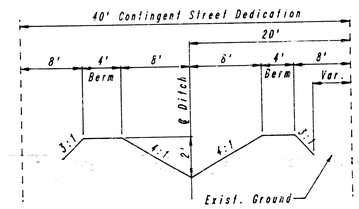


TYPICAL SECTION
STA. 1+20 TO STA. 2+00



* Varies from 20' at Sta. 0+80 to 26' at Sta. 1+20
** Varies from 4:1 at Sta. 0+80 to 1:1 at Sta. 1+20

TYPICAL SECTION
STA. 0+50 TO STA. 1+20



TYPICAL SECTION
STA. 0+00 TO STA. 0+50

NOTES

1. PAYMENT FOR DITCH IMPROVEMENTS SHALL BE INCLUDED IN THE BID PRICE FOR "LINEAR GRADING".
2. ALL AREAS DISTURBED BY DITCH CONSTRUCTION SHALL BE SEEDED, FERTILIZED, AND MULCHED IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY.
3. ALL TREES SHALL BE SPARED.
4. PROPERTY OWNER OF ADJACENT LAND TO NORTH OF AUTUMN RIDGE 2ND ADDITION SHALL BE GIVEN A MINIMUM OF 10 DAYS NOTICE PRIOR TO ANY EXCAVATION.

Denotes revised items

NO.	REVISION	DATE	BY
1	Revised ditch ℄'s	3/12/88	CSB

STORM WATER SEWER NO. 366

DITCH IMPROVEMENTS

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

12/12

Designed by	CSB	Checked by	
Drawn by	DEP	Date JULY, 1985	Job No. 88155-1

A-15-11