Lots 1 through 14 inclusive, Block 1: Lots 1 through 7 inclusive, Block 2: Lots 1 through 15 inclusive, Block 3: Lots 1 through 10 inclusive, Block 4: and Lots 1 through 5 inclusive, Block 5 in Turtle Run 3rd Addition (south of pawnee, west of Webb).

CONSTRUCTION PLANS FOR STORM WATER SEWER NO. 475

TURTLE RUN 3RD ADDITION

TO

THE CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER

DRAINAGE IMPROVEMENTS - PROJECT NO. 468-82590
DRAINAGE IMPROVEMENTS - INDEX CODE 750828

INDEX

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STANDARD TYPE 'P' MANHOLES	SHEET 9
DROP INLET	SHEET 10
TURTLE RUN 3RD ADDITION PLAT	SHEET 11

GENERAL NOTES:

1. Utility service lines, poles, valve boxes, meters and etc. 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. 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.

   All sutible excavation shall be wasted on low lying lots within the addition before any material is disposed of off site.

   All disposal sites must be approved by the Kansas Department of Health and Environment. Material either stockpiled or disposed of in a flood plain would require a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

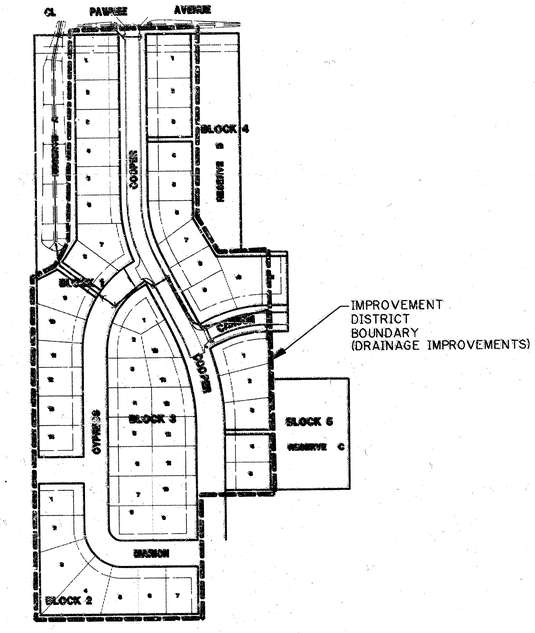
3. Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.

4. The Contractor shall be responsible for preserving property irons. The Contractor will be required to reestablish any property irons which are damaged or destroyed by his construction operations. Such irons shall be reestablished by a licensed land surveyor in accordance with state laws.

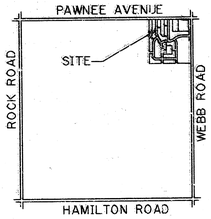
5. Trees are to be removed as needed. The cost is subsidiary to storm sewer construction costs.

6. Elevations are based on City of Wichita Datum.

7. Waste from the Drainage Channel shall be spread on Lots 1-7, Block 1 & Lots 1-8, Block 4, as designated by the Engineer.



Scale 1" = 150'



LOCATION MAP
No Scale

BOOKED 7-1-97 MCH D-343

BENCH MARKS

(City of Wichita Datum)

1. "T" cut in concrete curb 2' N. of S. end of existing pavement in front of Lot 7, Block 2 Turtle Run 2nd Addition.
   Elev. 1324.79 = 137.39 City of Wichita.
2. "T" cut in concrete curb 2' N. of S. end of existing pavement in front of Lot 5, Block 4 Turtle Run 2nd Addition.
   Elev. 1330.20 = 142.80 City of Wichita.
3. "T" cut on headwall (SE corner S. headwall) 5x5' RCB under approx. 1300' W. of NE. corner Sec. 5-28S-2E
   Elev. 1374.34 = 186.94 City of Wichita.
4. 80d nail in 6" hackberry 15' S. of SE. corner of Lot 1, Block 5 Turtle Run 2nd Addition
   Elev. 1328.79 = 141.39 City of Wichita.
5. 40d nail in service pole approx. 1330' S. and W. of NE corner Sec. 5-28S-2E
   Elev. 1392.09 = 204.69 City of Wichita.
6. City of Wichita Std. BM disc at Webb & Pawnee, 53' S. and 47' W. of centerline of both.
   Elev. 1393.08 = 205.68 City of Wichita.

TOTAL PROJECT LENGTH: 1387.1 L.F.= 0.26 Mi.

EARTHWORK SUMMARY

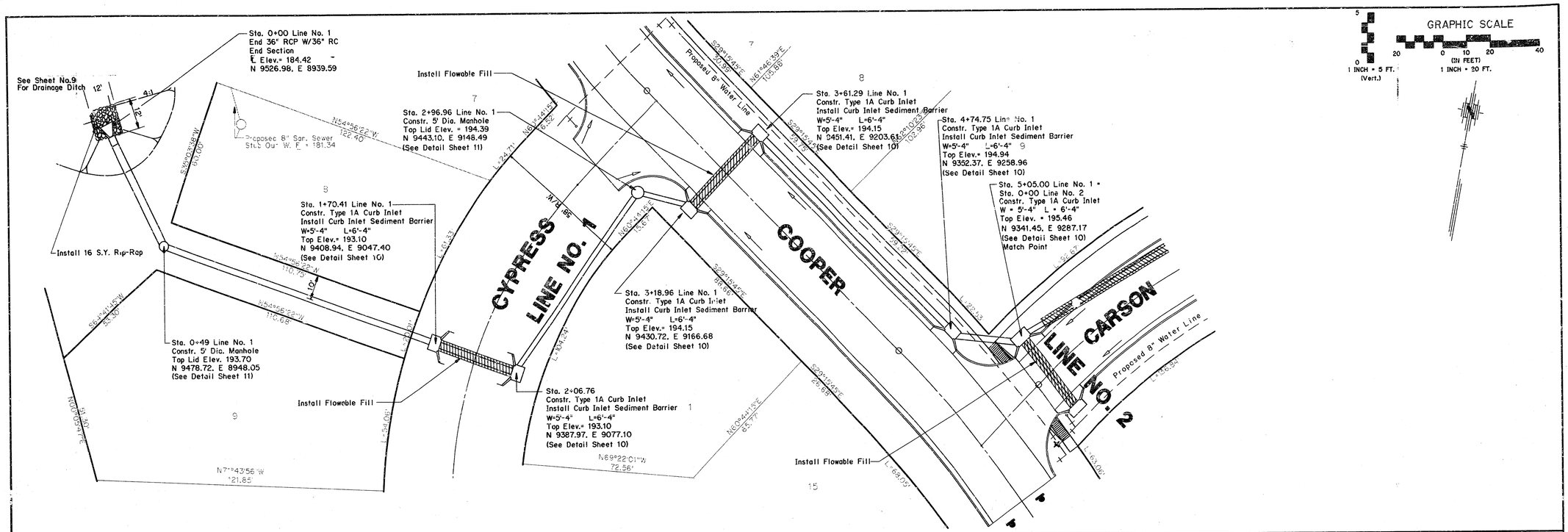
Excavation 3153.0 C.Y.

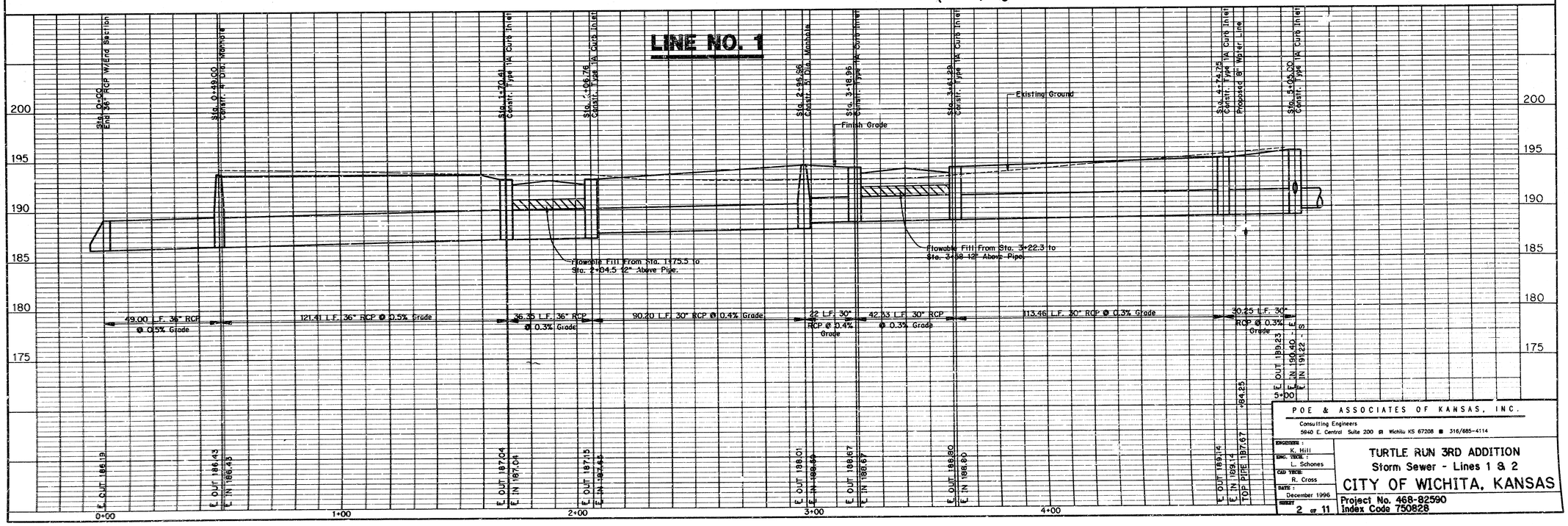
DECEMBER 1996

PLANS PREPARED
BY

POE & ASSOCIATES OF KANSAS, INC.
CONSULTING ENGINEERS
3500 E. Central, Suite 200 ■ Wichita, KS 67208 ■ 316/685-4114 ■ Fax 316/685-4444

KENNETH E. HILL 7596 LICENSED PROFESSIONAL ENGINEER
1-2-97



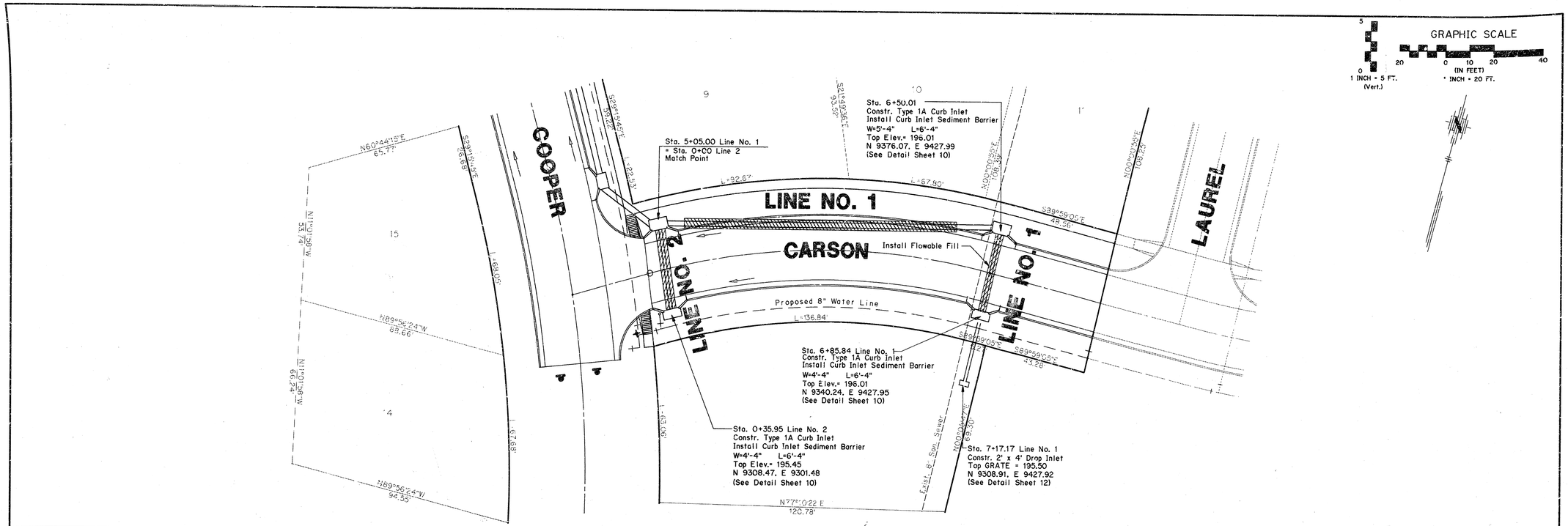


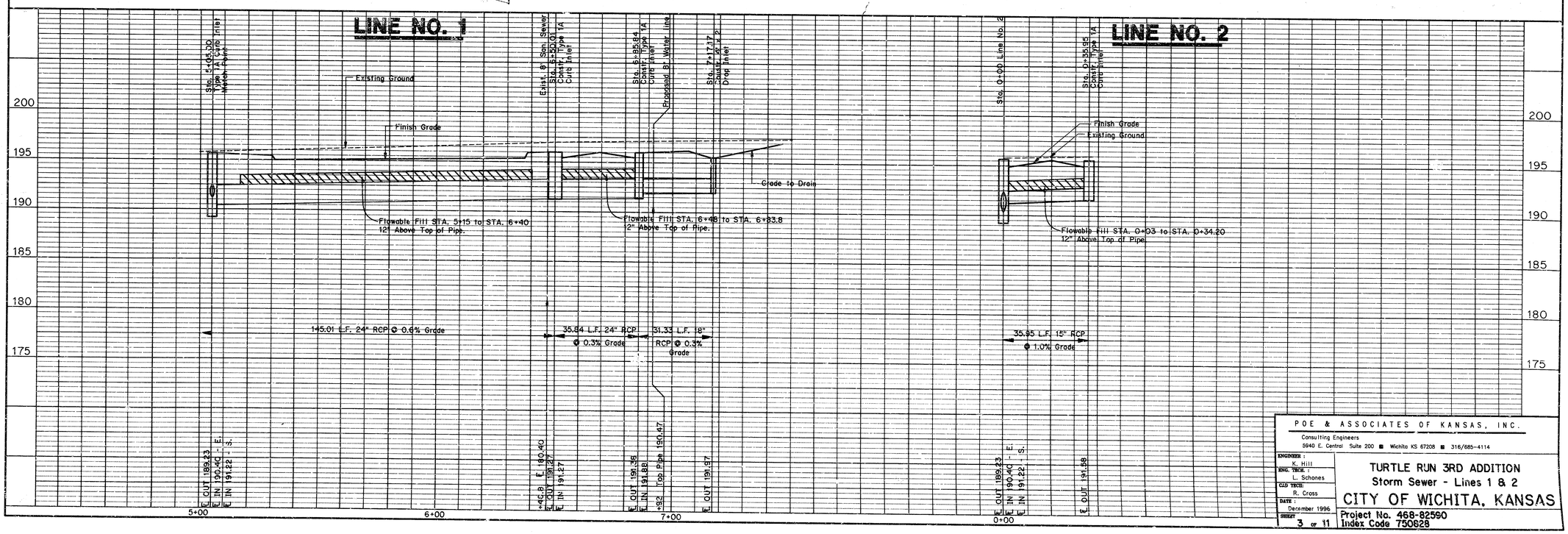
POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER : K. Hill
ENG. TECH. : L. Schones
CAD TECH. : R. Cross
DATE : December 1996
SHEET 2 OF 11

TURTLE RUN 3RD ADDITION
Storm Sewer - Lines 1 & 2
CITY OF WICHITA, KANSAS

Project No. 468-82590
Index Code 750828





POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
8940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER :	K. Hill
ENG. TECH. :	L. Schones
CAD TECH:	R. Cross
DATE :	December 1996
SHEET	3 OF 11

TURTLE RUN 3RD ADDITION
Storm Sewer - Lines 1 & 2
CITY OF WICHITA, KANSAS
Project No. 468-82590
Index Code 750828

Sta. 0+00 Line No. 4
Beg. 30" RCP W/30"
RC End Sections
℄ Elev. = 185.25
N 10007.94 E 9087.88

Sta. 0+75 Line No. 4
End 30" RCP W/30"
RC End Sections
℄ Elev. = 186.00
N 10007.92 E 9162.88

PAWNEE AVE

Install Flowable Fill

LINE NO. 4

Vary height of Curb
6" to 0" in 8'-0"

15'

10'

Special Ditch
See Detail this Sht.

TUG

16" Water

W

Install 9 S.Y. Rip Rap

Install 23 S.Y. Rip Rap

Sta. 0+00+ Line No. 3
Beg. 18" RCP W/18"
RC End Sections
℄ Elev. = 185.26
N 10001.50 E 9082.38

Install Flowable Fill

Pipeline

Pipe ire

LINE NO. 3

9" San. Sewer

Sta. 0+70.97 Line No. 3
Const. Type 1A Curb Inlet
W/4" Pipe Underdrain
Install Cub Inlet Sediment
Barrier
W = 4'-4" L = 6'-4"
Top Elev. = 190.04
N 9981.98 E 9146.05

Top Pipe 188.14

Sta. 0+29.65 Line No. 3
Const. Type 1A Curb Inlet
W/4" Pipe Underdrain
Install Cub Inlet Sediment
Barrier
W = 4'-4" L = 6'-4"
Top Elev. = 190.04
N 9982.00 E 9104.71

COOPER

GRAPHIC SCALE

5 0 20

0 10 20 40
(IN FEET)

1 INCH = 5 FT. (Vert.)

1 INCH = 20 FT.

N

GRASS SEED SLOPES

2:1 Depth Varies 2:1

4'

TYPICAL SPECIAL DITCH

LINE NO. 3

Sta. 0+00
Beg. 18" RCP W/End Sections

Sta. 0+29.65
Const. Type 1A Curb Inlet

Sta. 0+70.97
Const. Type 1A Curb Inlet

FINISH GRADE

Existing Ground

Exist. 16" Water Line

Flowable Fill From Sta.0+31.8
to Sta.0+68.8 12" Above Pipe

29.65 L.F. 18" RCP @ 1.0% Grade

41.34 L.F. 18" RCP @ 1.0% Grade

E 185.26

E OUT 185.57

E IN 185.57

E OUT 185.38

E 183.40

0+00

-0+80

LINE NO. 4

Sta. 0+00
Beg. 30" RCP W/End Sections

Sta. 1+05.54
End 30" RCP W/End Sections

FINISH GRADE

Existing Ground

Special Ditch

Special Ditch

Flowable Fill From Sta.0+19
to Sta.0+56 12" Above Pipe

75 L.F. 30" RCP @ 1.0% Grade

E 185.25

E 186.00

E 186.62

E 189.71

E 192.80

0+00

1+00

2+00

3+00

200
195
190
185
180
175

POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER : K. Hill
ENG. TECH. : L. Schones
CAD TECH: R. Cross
DATE : December 1996
SHEET 4 OF 11

TURTLE RUN 3RD ADDITION
Storm Sewer - Lines 3
CITY OF WICHITA, KANSAS

Project No. 468-82530
Index Code 750828

PAWNEE AVE

GRAPHIC SCALE
5 0 20 0 10 20 40
(IN FEET)
1 INCH = 5 FT. (Vert.)
1 INCH = 20 FT.

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8

S89°59'05"E 100.00'
S89°59'05"E 105.00'
S89°59'05"E 105.00'
S89°59'05"E 105.00'
S89°59'05"E 105.00'
S89°59'05"E 105.00'
S89°59'05"E 109.35'
N54°56'22"E 122.40'
N54°56'32"W 110.75'
110.68'

8" San. Sewer
Proposed 8" San. Sewer
100.00 | 65.00' | 63.00' | 63.00 | 63.00' | 63.00' | 35.00'
N00°00'55"E
60.00'
S35°03'38"W

Sta. 0+00
Beg. 8' Wide Drainage Ditch
N 10118.06, E 8957.86

Install 78 S.Y. Rip Rap

6' x 5' RCB
93.35'
S89°59'05"E
16" Water
T.U.G.
T.U.G.
W
W
20'
35'

RESERVE A
4:1
8'
4:1
GRASS SEED SLOPES
GRASS SEED SLOPES

Sta. 0+88
P.I. Drainage Ditch
N 9932.15, E 8938.79

540.29
S00°05'47"W

BLOCK 1

Sta. 4+88
End 8' Wide Drainage Ditch
N 9532.45, E 8932.68

Sta. 0+00 Line No. 1
End 36" RCP W/36" RC End Section
N 9526.98, E 8939.59

Sta. 0+00 Beg. Drainage Ditch at Ext. 6'x5' RCB
Sta. 0+15 T.U.G.
Sta. 0+18 T.U.G.
Sta. 0+23 16" Waterline
Sta. 0+38 P.I.
Sta. 0+50 6" Concrete Pipeline
Sta. 0+56 8" Concrete Pipeline
Sta. 0+67 8" San. Sewer
E 176.60
Sta. 4+88 End 8' Wide Drainage Ditch

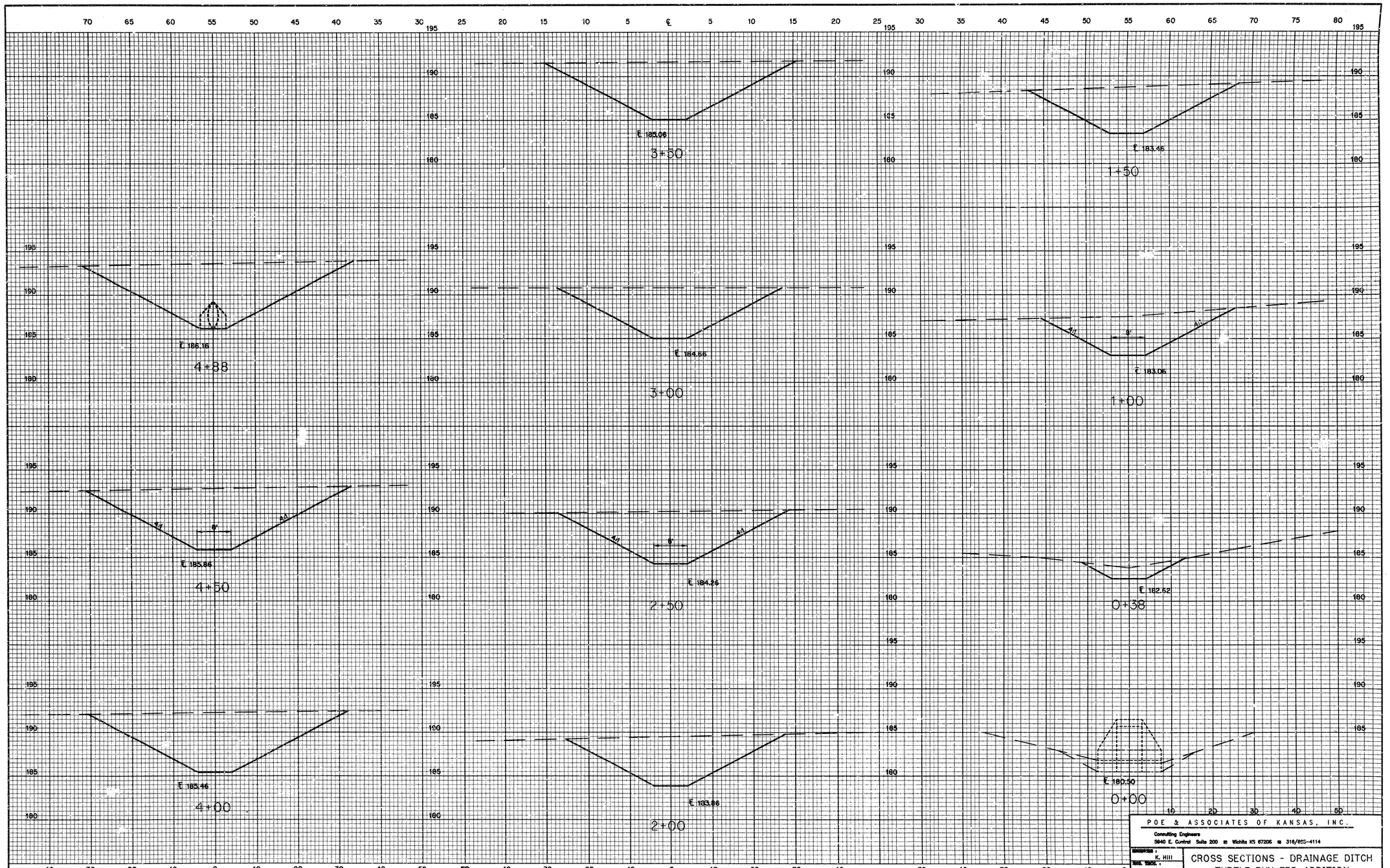
Existing Ground
D.W.S
0.8% Grade
5.42% Grade
Exist. 6' X 5' RCB
36" RCP
E 180.50
E 182.56
E 183.06
E 183.86
E 184.66
E 183.46
E 186.16
Top Pipe 177.00
+38
0+00
1+00
2+00
3+00
4+00
4+88
200
195
190
185
180
175

POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER : K. Hill
ENG. TECH. : L. Schones
CAD TECH: R. CROSS
DATE : December 1996
SHEET 5 of 11

TURTLE RUN 3RD ADDITION
Storm Sewer - Drainage Channel
CITY OF WICHITA, KANSAS

Project No. 472-82590
Index Code 750828

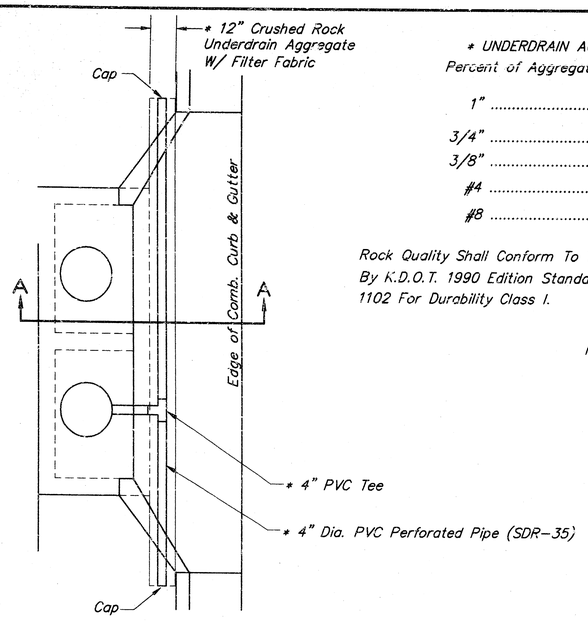


POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

DESIGNED	K. Hill
DRAWN	L. Schones
CHECKED	R. Cross
DATE	December 1996
SHEET	6 of 11

CROSS SECTIONS - DRAINAGE DITCH
TURTLE RUN 3RD ADDITION
CITY OF WICHITA, KANSAS

PROJECT NO. 468-82590
INDEX CODE 750828



PLAN

* UNDERDRAIN AGGREGATE

Percent of Aggregate Retained

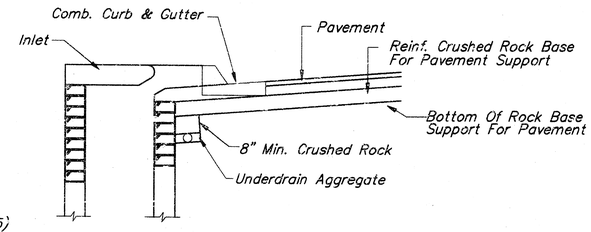
1"	0
3/4"	0 to 10
3/8"	45 to 80
#4	90 to 100
#8	95 to 100

Rock Quality Shall Conform To The Requirements Specified By K.D.O.T. 1990 Edition Standard Specification Subsection 1102 For Durability Class 1.

NOTE: Place 4" PVC Perforated Pipe at all drainage sump locations.

Cost of Underdrain System to be incidental to the Reinforced Crushed Rock Subgrade.

Inlet Type May Vary From That Shown.

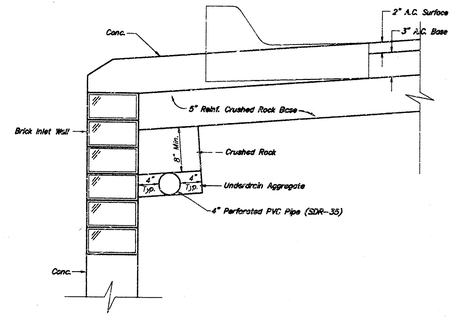


(Min. 16 Perforations Per Lin. Ft. @ 1/4" Dia.)
Perforations To Be on Bottom Half

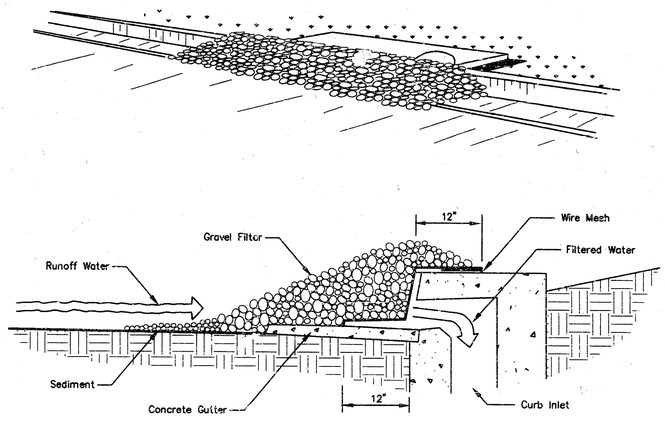
SECTION A-A

PAVEMENT UNDERDRAIN DETAIL

NOTE: Paving Contractor will connect Underdrain Pipe to 4" PVC Stub provided by Storm Sewer Contractor.



TRENCH DRAIN DETAIL FOR RES. STREETS

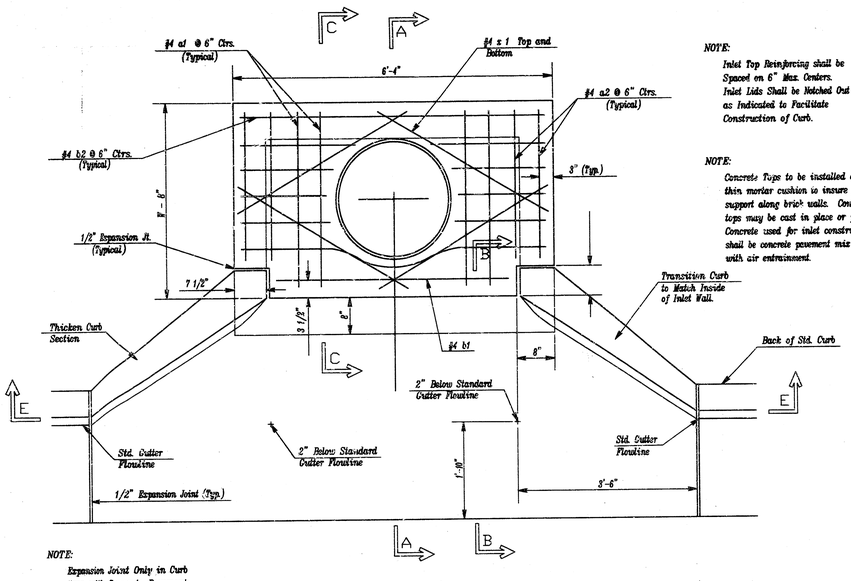


GRAVEL CURB INLET SEDIMENT BARRIER

POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/685-4114

ENGINEER : K. Hill	Turtle Run 3rd Addition
ENG. TECH. : L. SCHONES	PAVEMENT DETAILS
CAD TECH: R. Cross	CITY OF WICHITA, KANSAS
DATE : December 1996	Project No. 468-82590
SHEET 7 of 11	Index Code 750828

F:\APPS\DCA\PSHEETS\MD-PLT Mon Dec 9 10:16:27 1996 Dirt 4 fungi 4 mushroom-Poe & Assoc.

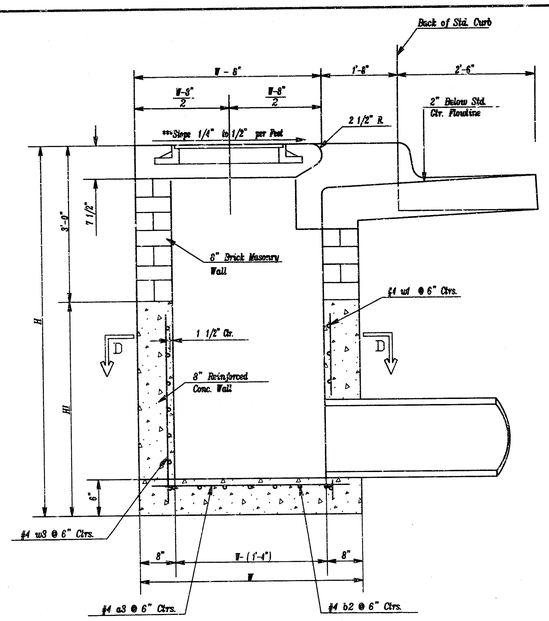


NOTE:
Expansion Joint Only in Curb Area with Concrete Pavement.

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:
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 with air entrainment.

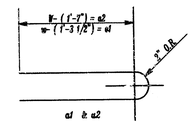


SECTION A–A

***NOTE: Slope of Inlet tops to Match Sidewalk or Parking Slopes within Limits Indicated.

PRECAST 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	
*w1	#4	6	6'-7"	6	6'-7"	6	10'-7"	6	12'-7"	6	14'-7"	
a2	#4	4	6'-0"	4	6'-0"	4	10'-0"	4	12'-0"	4	14'-0"	
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"	
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	
*b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"	
z1	#4	2	3'-10"	8	4'-2"	8	4'-8"	8	4'-10"	8	5'-2"	
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	
w1	#4	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	①	6'-1"	
w2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"	
w3	#4	32	②	36	②	40	②	44	②	48	②	

* Field Bend or Cut Reinforcing as Required for Clearance.
① 4 (H1 - 12") (H1 - 21") Rounded down to nearest 0.5".
② H1 - 3".

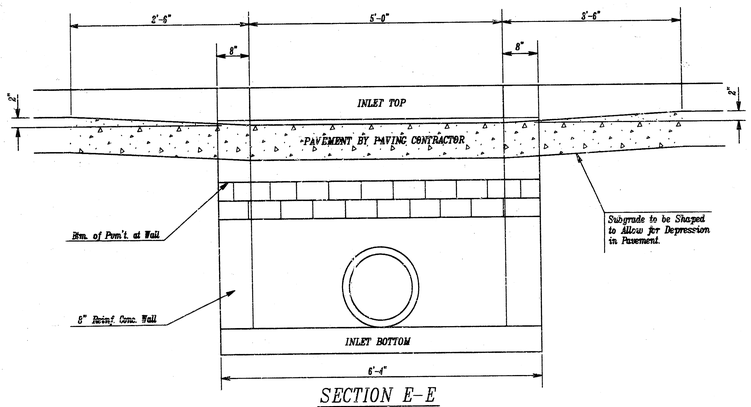


BENDING DIAGRAM

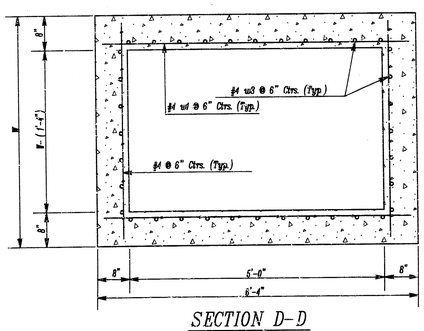
STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC
4'-4"	3'-8" 6'-4" 7½"	21" & SMALLER	0.38±
5'-4"	4'-8" 5'-4" 7½"	24" & 30"	0.51±
6'-4"	5'-8" 6'-4" 7½"	36" & 42"	0.64±
7'-4"	6'-8" 6'-4" 7½"	48" & 54"	0.77±
8'-4"	7'-8" 6'-4" 7½"	60" & 66"	0.90±

GENERAL NOTES

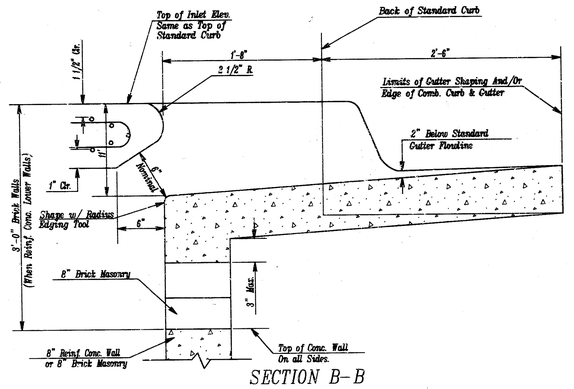
1. The contractor shall be required to constr t 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" or less and H=7'-0" or less. When W is greater than 6'-4" and H is less than 7'-0" the outside inlet walls below the brick stack shall be reinforced concrete construction and the center wall shall be of masonry construction as shown for the masonry wall option.
2. Inlet invert shall be shaped with 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.
3. 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 Class A.
4. Inlet top reinforcing shall be spaced on 6" max. centers. Inlet lids shall be notched out as indicated to facilitate construction of curb. Bars in inlet top to be field bent or cut to clear manhole ring.
5. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.
6. For frame and cover details, see MANHOLE/INLET FRAME AND COVER DETAIL sheet. Use light type frame.
7. Pre-Cast Concrete Inlets may be substituted for the Type 1A and 1B specified herein. All dimensions shall remain the same. The contractor shall provide the Engineer with applicable details or shop drawings prior to proceeding with construction for his approval.



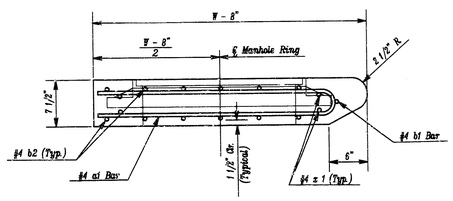
SECTION E–E



SECTION D–D



SECTION B–B

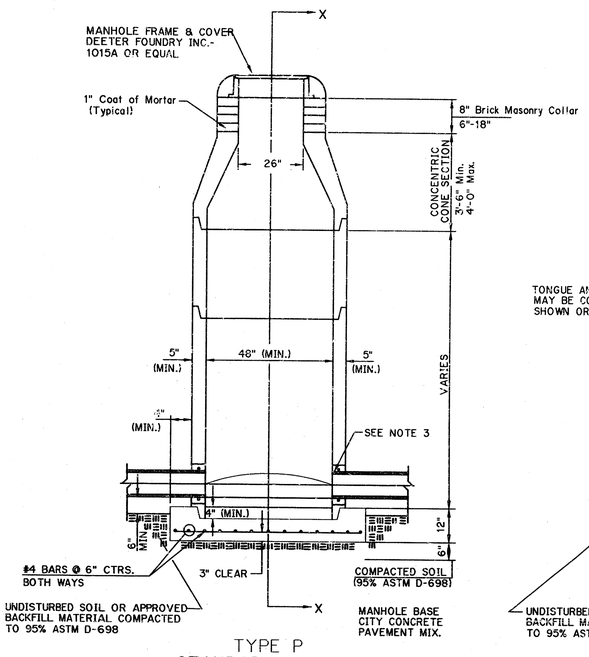


SECTION C–C

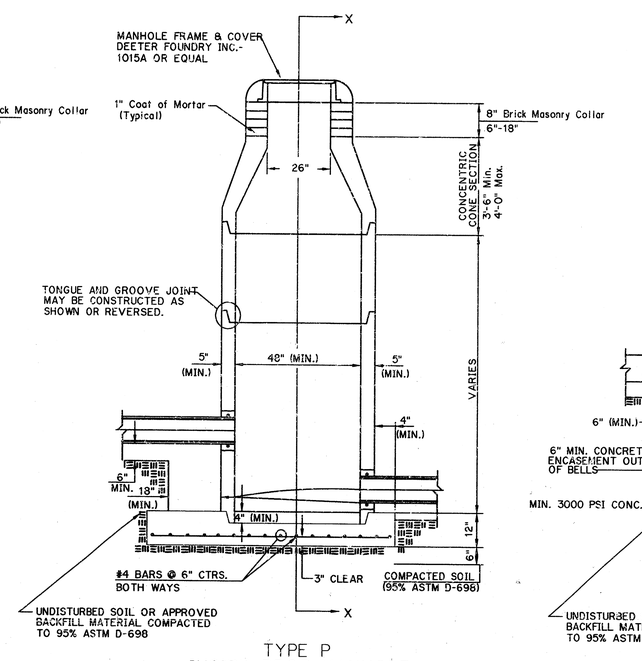
POE & ASSOCIATES OF KANSAS, INC.
Consulting Engineers
5940 E. Central Suite 200 ■ Wichita KS 67208 ■ 316/655-4114

ENGINEER : K. Hill	CURB INLET DETAILS
ENG. TECH. : Pick One	TURTLE RUN 3RD ADDITION
CAD TECH: R. Cross	CITY OF WICHITA, KANSAS
DATE : December 1996	PROJECT NO. 468-82590
SHEET 8 OF 11	INDEX CODE 750828

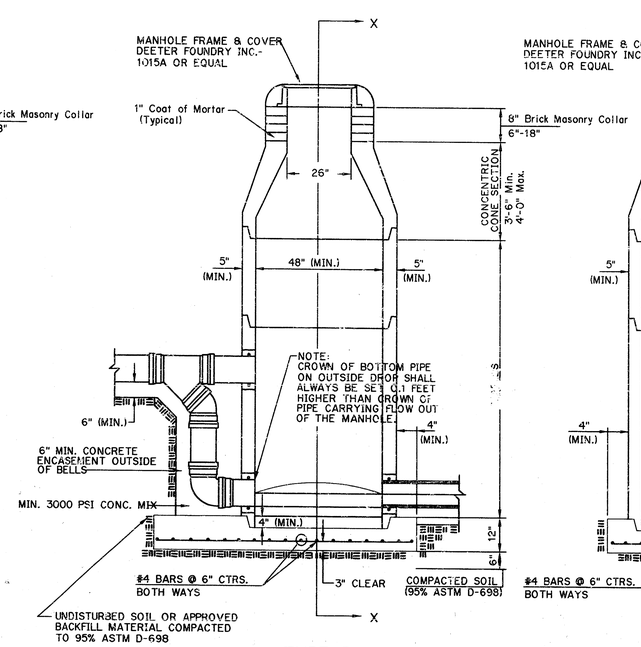
SEWER APPURTENANCES DETAILS



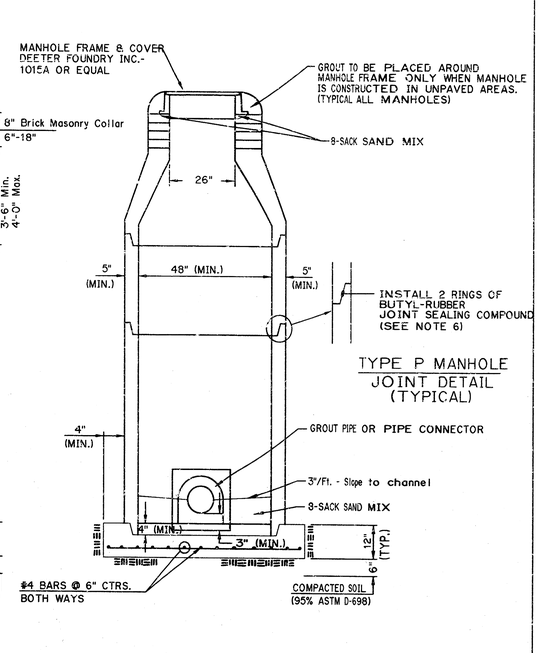
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES

PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC SERIES 66 HI-BUILD EPOXOLINE. DRY THICKNESS OF 8 MILS (MIN.)
5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MAHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.

THE CITY OF WICHITA

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4519 FAX

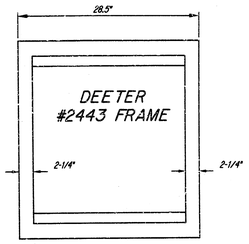
STANDARD TYPE 'P' MANHOLES

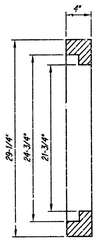
M. E. LINDEBAK P.E. – CITY ENGINEER

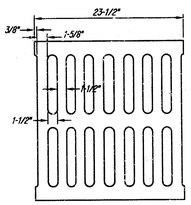
PROJECT NUMBER	INDEX CODE
468-82590	750828

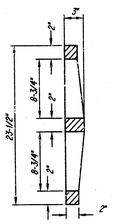
DATE: DEC 96

SHEET 9 OF 11





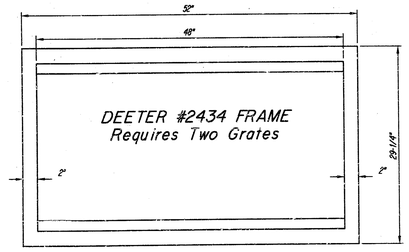


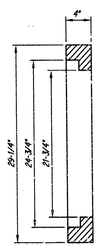


DEETER #2433 GRATE

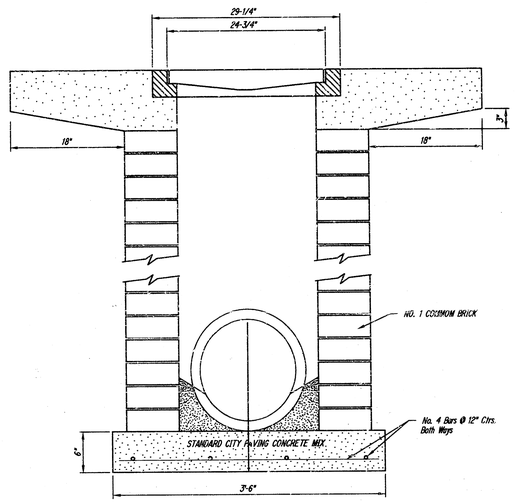
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

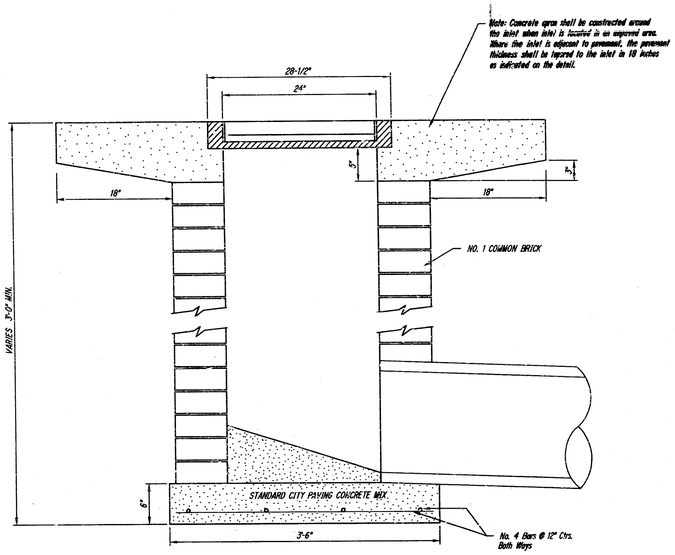
24" x 24" Frame and Grate Detail

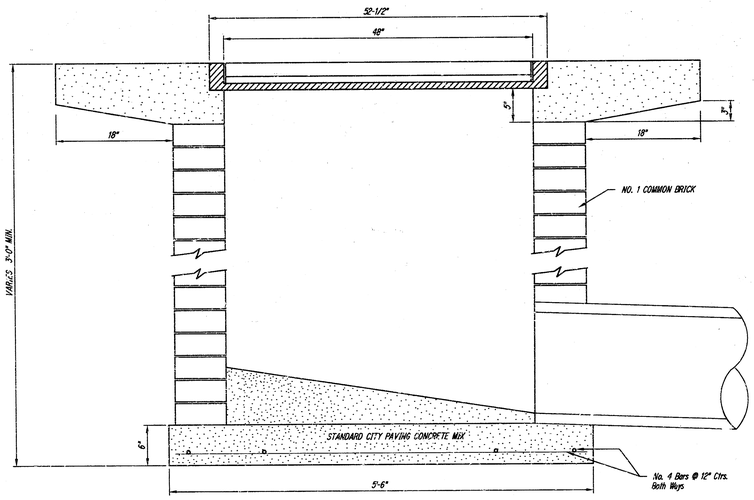




Double 24" x 24" Frame Detail







THE CITY OF WICHITA

CITY ENGINEER'S OFFICE
CITY HALL – SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4351
(316) 268-4114 FAX

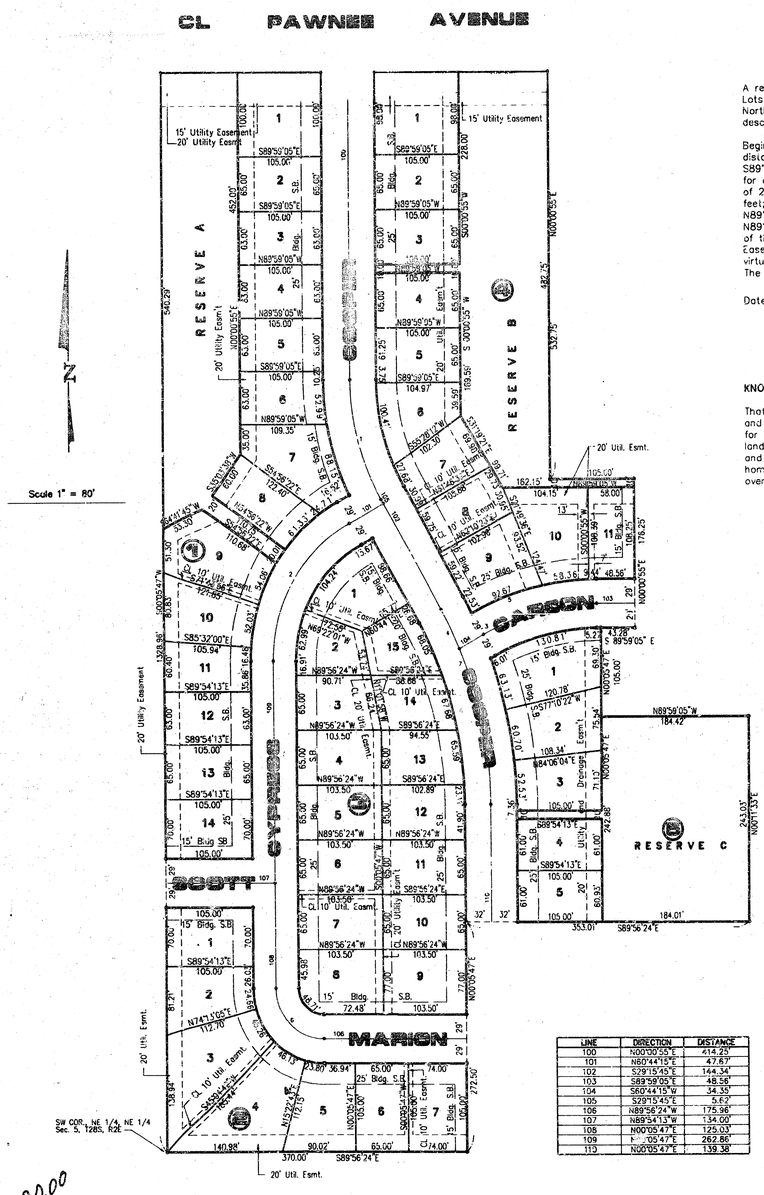
DROP INLET
2' X 2'/2' X 4'

M. E. LINDEBAK P.E. – CITY ENGINEER

PROJECT NUMBER	INDEX CODE
468-82590	750823

DATE: DEC. 96

PC67-4



LINE	DIRECTION	DISTANCE
100	N00°00'55"E	414.25'
101	N60°44'15"E	47.67'
102	S29°15'45"E	144.34'
103	S89°59'05"E	48.56'
104	S60°44'15"W	34.35'
105	S29°15'45"E	5.62'
106	N89°56'24"W	175.96'
107	N89°54'13"W	134.00'
108	N00°05'47"E	125.03'
109	N00°05'47"E	262.86'
110	N00°05'47"E	139.38'

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
1	290.00'	148.19'	75.75'	146.58'	S14°37'25"E	29°16'40"
2	187.00'	197.92'	109.36'	188.81'	S30°25'01"W	60°38'28"
3	285.00'	145.63'	74.44'	144.05'	S75°22'35"W	29°16'40"
4	470.00'	51.62'	25.84'	51.60'	N26°06'57"W	06°17'35"
5	314.00'	180.47'	82.03'	178.73'	S75°22'28"W	29°16'52"
6	60.00'	94.29'	60.04'	84.88'	S44°50'18"E	90°02'11"
7	470.00'	189.21'	95.90'	187.93'	N11°26'11"W	23°03'57"

A replat of Lots 1 through 18, Block 1; Lots 1 through 14, Block 2; Lots 1 through 20, Block 4; Lots 5 through 11, Block 5; Lots 1 through 10, Block 7; and Reserves A, B, and C, Cottage Gardens an addition to Wichita, Kansas located in the Northeast Quarter of Section 5, Township 28 South, Range 2 East of the 6th P.M. Sedgwick County, Kansas, more particularly described as follows:

Beginning at the Northwest Corner of the Northeast Quarter of said Northeast Quarter, thence S00°05'47"W for a distance of 1328.96 feet to the Southwest Corner of the Northeast Quarter of said Northeast Quarter; thence S89°56'24"E along the South line of Cottage Gardens Addition for a distance of 370.00 feet; thence N00°05'47"E for a distance of 272.50 feet; thence S89°56'24"E for a distance of 353.01 feet; thence N00°11'33"E for a distance of 243.03 feet; thence N89°59'05"W for a distance of 184.42 feet; thence N00°05'47"E for a distance of 105.00 feet; thence S89°59'05"E for a distance of 43.28'; thence N00°00'55"E for a distance of 1/6.25 feet; thence N89°59'05"W for a distance of 105.00 feet; thence N00°00'55"E for a distance of 532.75 feet; thence N89°59'05"W along the North line of the Northeast Quarter of the Northeast Quarter of Sec. 5, Township 28 South, Range 2 East of the 6th P.M. Sedgwick County, Kansas, for a distance of 476.28 feet to the point of beginning.
Easements and other public reservations are hereby vacated to conform to those shown on this plat by virtue of KSA 12-512(b) as amended.
The accompanying plat is a true and correct exhibit of property surveyed.

Dated this 5TH day of MARCH, 1996.

Kenny E. Hill, L.S. 984

KENNY E. HILL LICENSED L.S. 984 KANSAS LAND SURVEYOR

KNOW ALL ME,, BY THESE PRESENTS:

That we, the undersigned, have caused the land described in the Surveyor's Certificate to be platted into lots, blocks, streets and reserves. The streets are hereby dedicated to and for the use of the public. Easements are hereby granted as indicated for the construction and maintenance of drainage and utilities. Reserves A, B, and C shall permit lighting, drainage, landscaping, utilities, sidewalks, fencing, recreation facilities, irrigation systems and open space. All reserves are to be owned and maintained by a property owners association its successors and assigns. The minimum low opening elevation for the homes built in this addition shall be 190.0 (City of Wichita Datum). All abuters' rights of access to or from Pawnee Avenue over and across the North line of Reserve A and B; Lot 1, Block 1; and Lot 1, Block 4 are hereby granted to the City of Wichita.

Pawnee Development, Inc.

Devoe Treadwell, President

Thea Treadwell, Secretary

KNOW ALL MEN BY THESE PRESENTS:

That we, Bank IV, N.A., holders of a mortgage on the property described in the Surveyor's Certificate, do hereby consent to the plat of Turtle Run 3rd Addition.

Thomas J. McGrath, Assistant Vice-President

STATE OF KANSAS, COUNTY OF SEDGWICK: ss

This instrument was acknowledged before me on this 5th day of March, 1996, for Bank IV, N.A. by Thomas J. McGrath, Assistant Vice President.

SHEILA L. THRUSH NOTARY PUBLIC STATE OF KANSAS My Appt. Exp. 9-28-99

Notary Public Sheila L. Thrush

My appointment expires: Sept. 28, 1999

11th March

Notary Public CAROL A. BARNES

CAROL R. BARNES Notary Public - State of Kansas My Appt. Expires 9-28-96

My Appointment Expires:

This plat of TURTLE RUN 3RD ADDITION to Wichita, Kansas has been submitted to and approved by this WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, Wichita, Kansas.

Dated this 31st day of August, 1996

WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

Susan Osborne - Howes, Chairman

Marvin S. Kroul, Secretary

SEAL

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 2ND day of APRIL, 1996.

Bob Knight, Mayor

Pat Burnett, Deputy City Clerk

#1537766

Entered on transfer record this 27th day of June, 1996.

SUSAN E. CROCKETT-BROOK, COUNTY CLERK

This is to certify that this instrument was filed for record in the Register of Deeds Office at 10:00 A.M. ~~P.M.~~ on the 28TH day of JUNE, 1996.

Pat Kettler, Register of Deeds

~~Ed Ross, Chief Deputy~~ DEPUTY
DIANA MANHEIMER

Benchmarks

1. City of Wichita Std. BM disc at Webb & Pawnee. 53' S. & 47' W. centerline of both. Elev. 205.68
2. "□" on headwall (SE corner South Headwall) 5'x 5' RCB under Pawnee approximately 1300' W of NE Corner Sec. 5-28S-2E. Elev 186.94
3. 40d nail in service pole approximately 1330' S. and 150' W. of NE Corner Sec. 5-28S-R2E. Elev. 204.69

20.00 ck

TURTLE RUN 3RD ADDITION

TO WICHITA - SEDGWICK COUNTY, KANSAS

PROJECT NO. 468-82590
INDEX CODE 750828
SHEET 11 of 11
~~N-2-30~~

PC67-4

APPS\DATA\PLAT\SURVEY-PLAT Tue Mar 5 12:24:40 1996 Jim Ubert - Pat G Assoc.