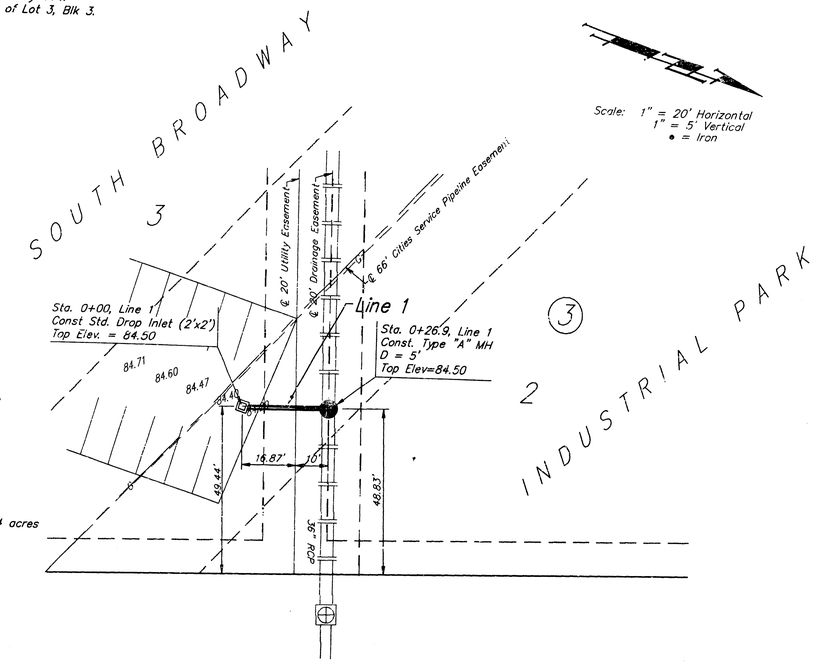
Bench Mark: R.R. spike in power pole located approximatly 44'W & 5'S of the Southeasterly most point of Lot 3, Blk 3. South Broadway Industrial Park. Elevation = 85.53 (City Datum)

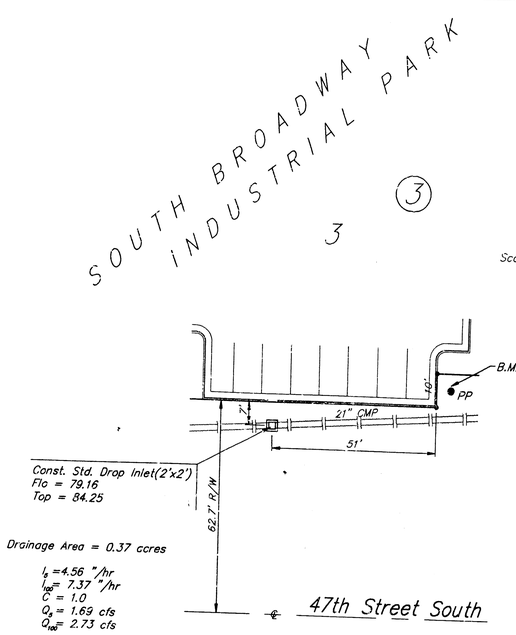


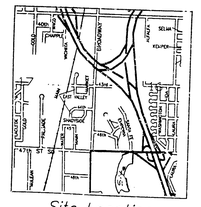
Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron

Note: Drainage Calculations include roof drainage.

Drainage Area = 0.44 acres

I_5 = 4.56 "/hr
I_{100} = 7.37 "/hr
C = 1.0
Q_5 = 2.01 cfs
Q_{100} = 3.24 cfs





Site Location

Bench Mark: R.R. spike in power pole located approximatly 44'W & 5'S of the Southeasterly most point of Lot 3, Blk 3. South Broadway Industrial Park. Elevation = 85.53 (City Datum)

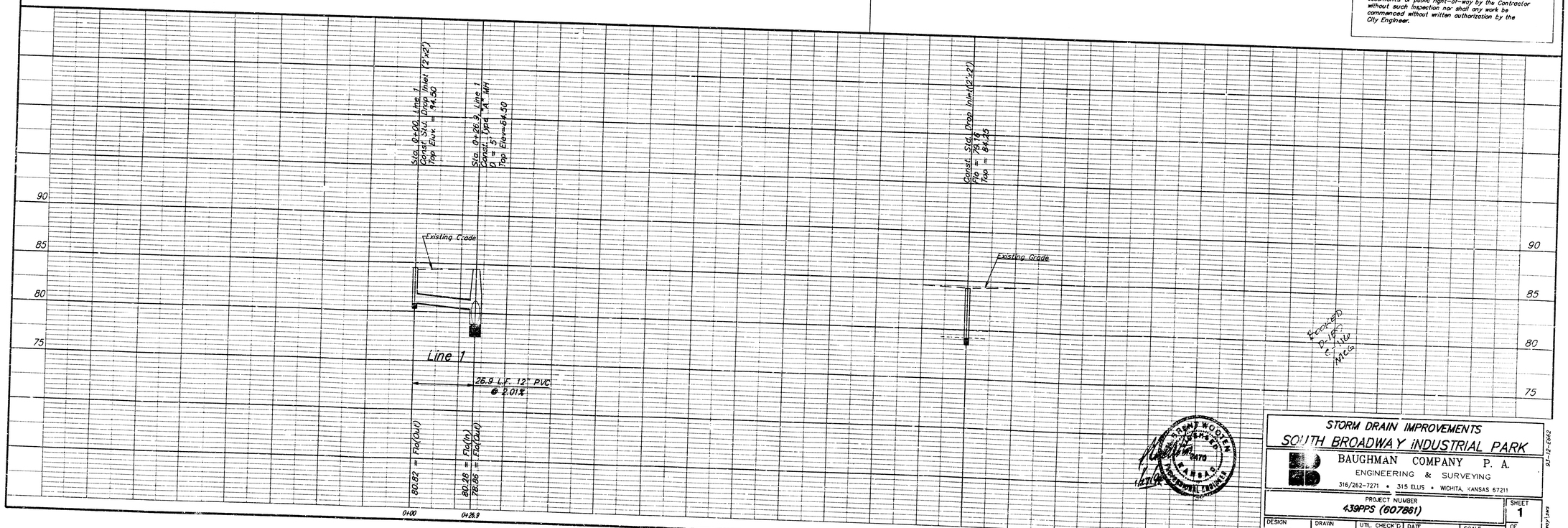
Drainage Area = 0.37 acres

I_5 = 4.56 "/hr
I_{100} = 7.37 "/hr
C = 1.0
Q_5 = 1.69 cfs
Q_{100} = 2.73 cfs

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
Sanitary Sewers
Storm Sewers 1-31-94 A.S.
Driveway Approaches
Water Mains
Paving

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said Inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer.



STORM DRAIN IMPROVEMENTS
SOUTH BROADWAY INDUSTRIAL PARK

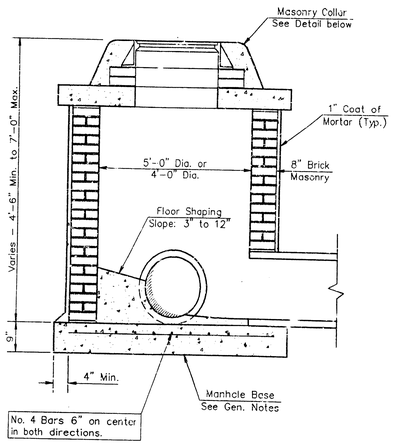
BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER
439PPS (607861)

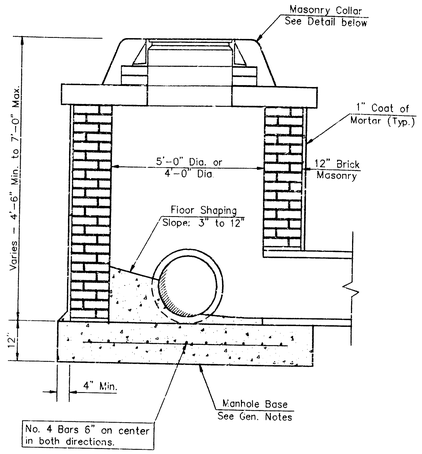
SHEET 1 OF 3

DESIGN	DRAWN	UTIL. CHECK'D	DATE	SCALE
B.P.	MSP		Jan. 1994	Noted

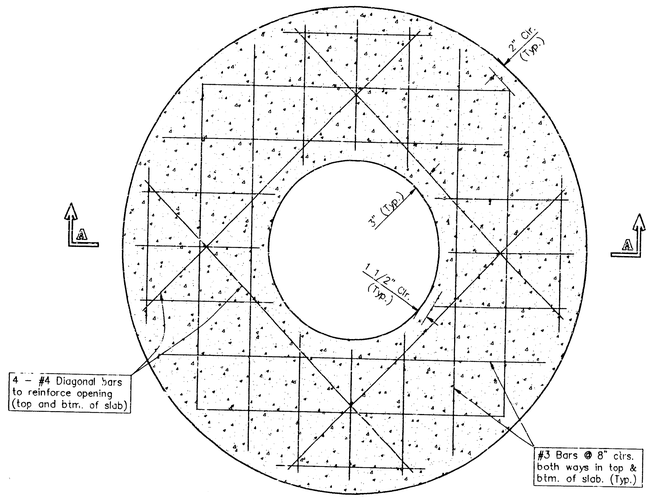
93-12-6862
broadway1.pwg



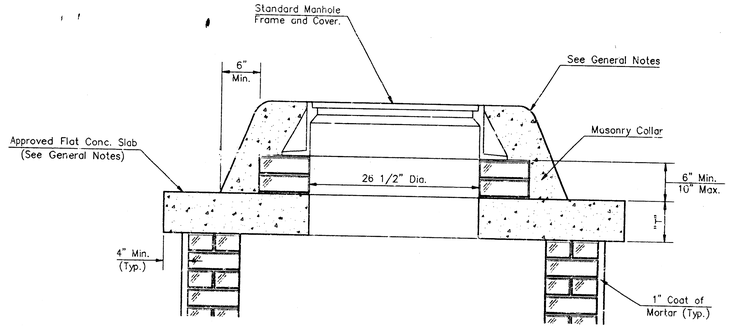
SHALLOW TYPE "A" MANHOLE



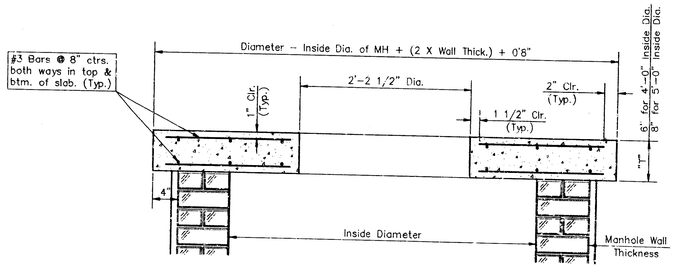
SHALLOW TYPE "B" MANHOLE



PLAN

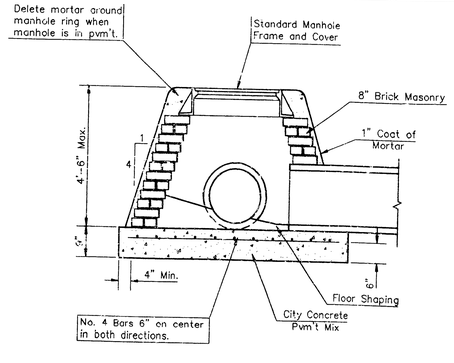


MASONRY COLLAR DETAIL

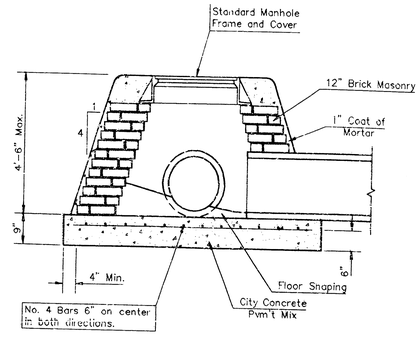


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

GENERAL NOTES

1. 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 cement 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. Type "A" shallow manholes can be used on sewers when the manhole is not located within public street pavement. 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.

2. 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 6" 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.

3. 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. 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.

4. 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 manhole. 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.

5. 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 drawings.

6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

7. Standard shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type and diameter indicated. Standard special shallow manholes type "A" and "B" shall be paid for at the unit price bid per each for the type indicated. All standard shallow manhole diameters will be 4' unless indicated otherwise.

8. All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

CITY OF WICHITA, KANSAS

STANDARD SHALLOW MANHOLES

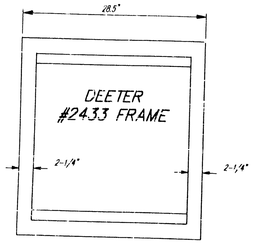
TYPE 'A' AND TYPE 'B'

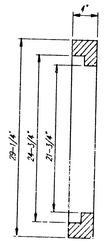
PROJECT NUMBER
439 PPS (607861)

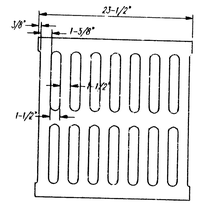
SHEET 2 OF 3

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7221 • 315 ELLIS • WICHITA, KANSAS 67211

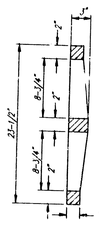
DETAIL\SHLWMH.DWG





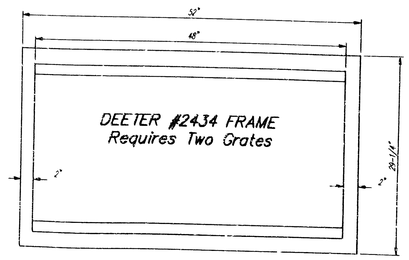


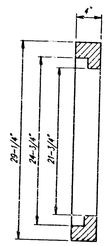
DEETER #2433 GRATE



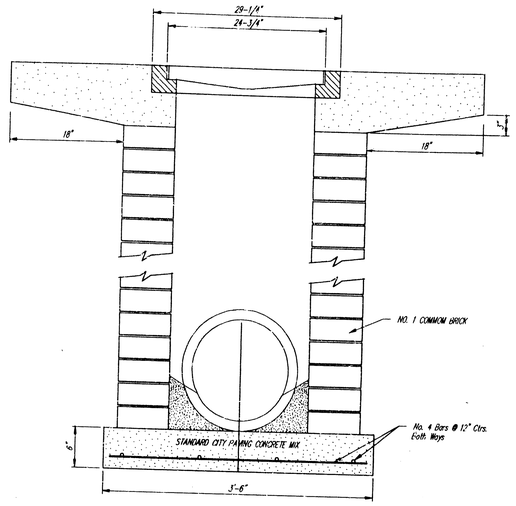
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.

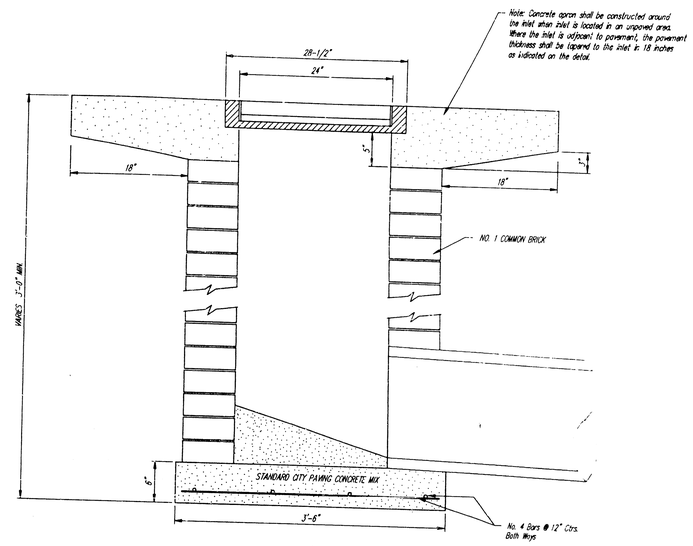
24" x 24" Frame and Grate Detail

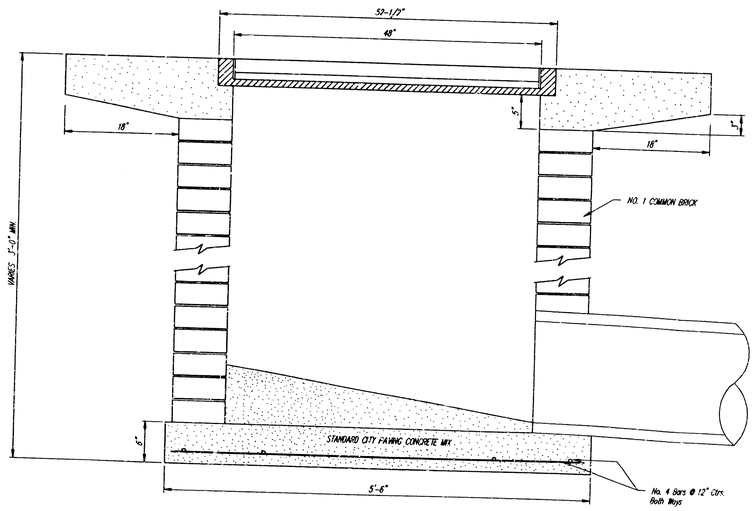




Double 24" x 24" Frame Detail







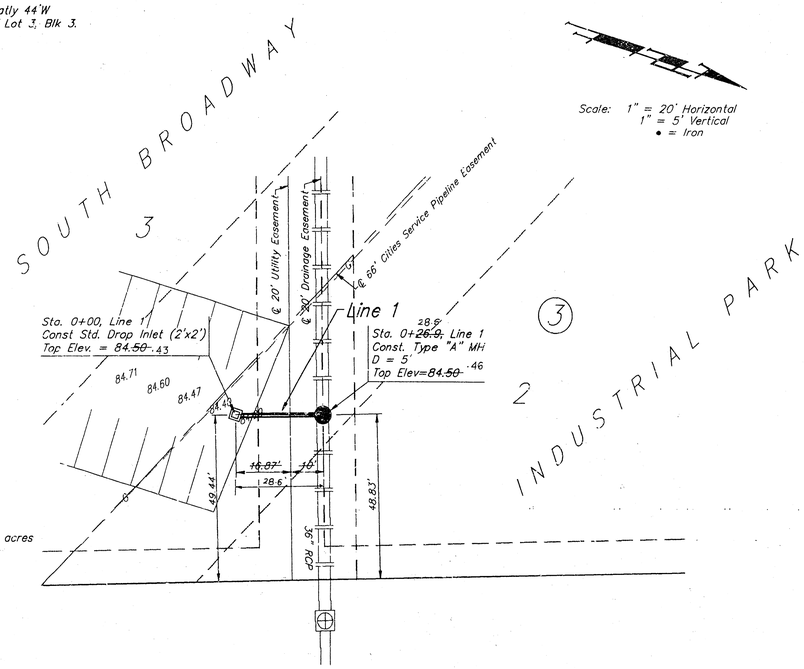
DROP INLET DETAILS
M.E. Lindebak, City Engineer
City of Wichita, Kansas

Project Number	3
439 PPS (607851)	3

19-1-3-10

Bench Mark: R.R. spike in power pole located approximatly 44'W & 5'S of the Southeasterly most point of Lot 3, Blk 3. South Broadway Industrial Park. Elevation = 85.53 (City Datum)

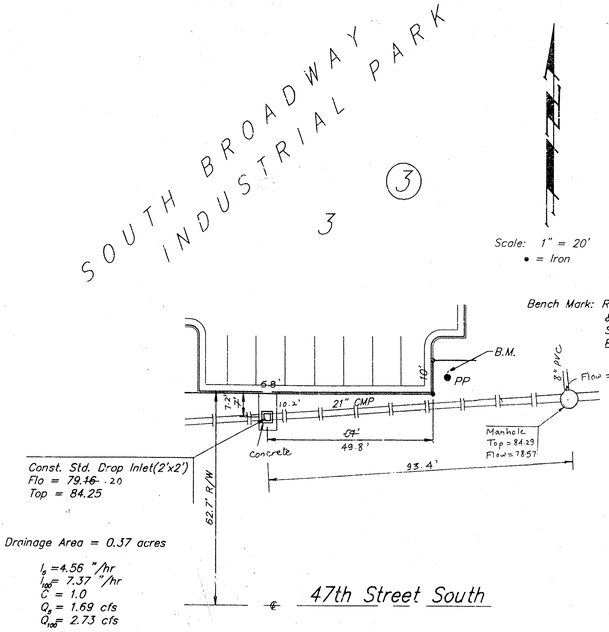
Scale: 1" = 20' Horizontal
1" = 5' Vertical
• = Iron



Note: Drainage Calculations include roof drainage.

Drainage Area = 0.44 acres

I_s =4.56 "/hr
I_{100}= 7.37 "/hr
C = 1.0
Q_s = 2.01 cfs
Q_{100}= 3.24 cfs



Scale: 1" = 20'
• = Iron



Site Location

Bench Mark: R.R. spike in power pole located approximatly 44'W & 5'S of the Southeasterly most point of Lot 3, Blk 3. South Broadway Industrial Park. Elevation = 85.53 (City Datum)

Const. Std. Drop Inlet(2'x2')
Flo = 79.16 .20
Top = 84.25

Drainage Area = 0.37 acres

I_s =4.56 "/hr
I_{100}= 7.37 "/hr
C = 1.0
Q_s = 1.69 cfs
Q_{100}= 2.73 cfs

47th Street South

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers 1-31-94 P.E.S.
Driveway Approaches _____
Water Mains _____
Paving _____

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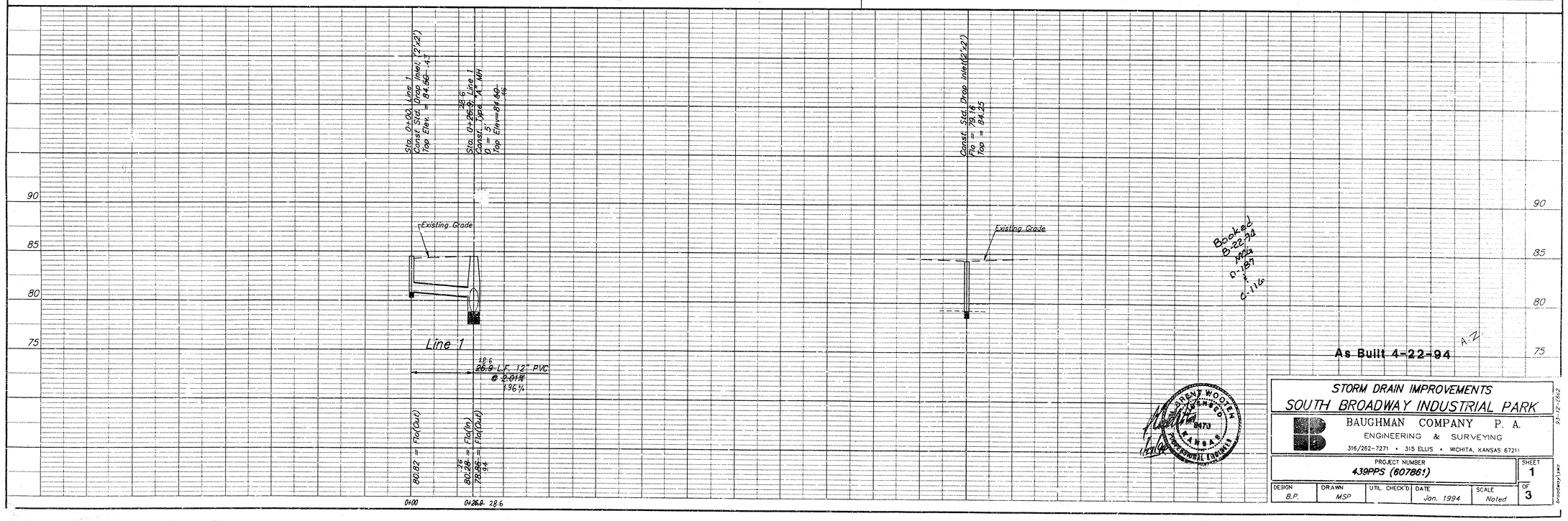

Booked
B-22-94
MCG
D-187
&
C-116

As Built 4-22-94

A.Z.

STORM DRAIN IMPROVEMENTS
SOUTH BROADWAY INDUSTRIAL PARK

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
439PPS (607861)	1

DESIGN	DRAWN	UTIL. CHECK'D	DATE	SCALE	OF
B.P.	MSP		Jan. 1994	Noted	3

93-12-5662
broadway\swd