# STORM WATER SEWER IMPROVEMENTS TO SERVE

# PARK MEADOW ESTATES THIRD ADDITION

Private Project Number

**745 PPS (607861)**

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

## GENERAL NOTES:

1. Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

   Kansas One-Call 687-2470

   The Contractor must notify the following in case of an emergency:

   | | |
   |---|---|
   | Cablevision | 262-4270 |
   | or | 263-2061 |
   | K.P.L. Gas Service Company | 263-7511 |
   | Kansas Gas & Electric Company | 264-1141 |
   | Arkla Gas Company | 942-8350 |
   | or | 263-8161 |
   | Southwestern Bell Telephone Company | 1-571-2611 |
   | City of Wichita Water Department | 268-4908 |
   | City of Wichita Sewer Maintenance | 268-4071 |

2. 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 or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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.

3. 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.

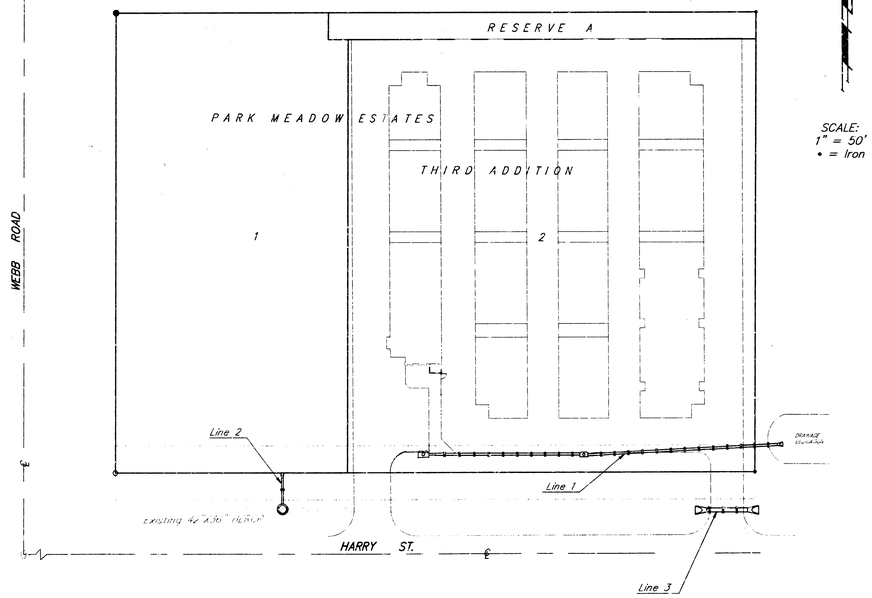
4. All areas disturbed by construction operations shall by seeded with rye grass at a rate of 300 lbs/acre immediately following construction in that area. Ground shall be prepared per City of Wichita specifications prior to seeding.

5. 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.

6. The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

7. 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.

8. Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.




SCALE:
1" = 50'
• = Iron

## BENCHMARK:

City of Wichita Benchmark at Webb Road and Harry in Southeast Corner of Signal Light Pole Base 42.7' SSE of Center of Existing Fire Hydrant.

Elevation = 1371.64 (City Datum)

## INDEX:


1 Title Sheet
2 Lines 1,2 & 3
3 Single Type 1 Inlet Detail
4 Double Type 1 Inlet Detail
5 Standard Shallow Manhole Detail
6 Park Meadow Estates Third Addition Plat

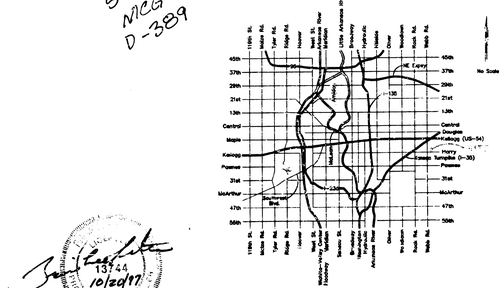

**APPROVED AS NOTED**
**BY CITY ENGINEER OF WICHITA**

Storm Sewer VRH 10/20/97

**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. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

BOOKED
5-1-98
MCG
D-389




13744
10/24/97

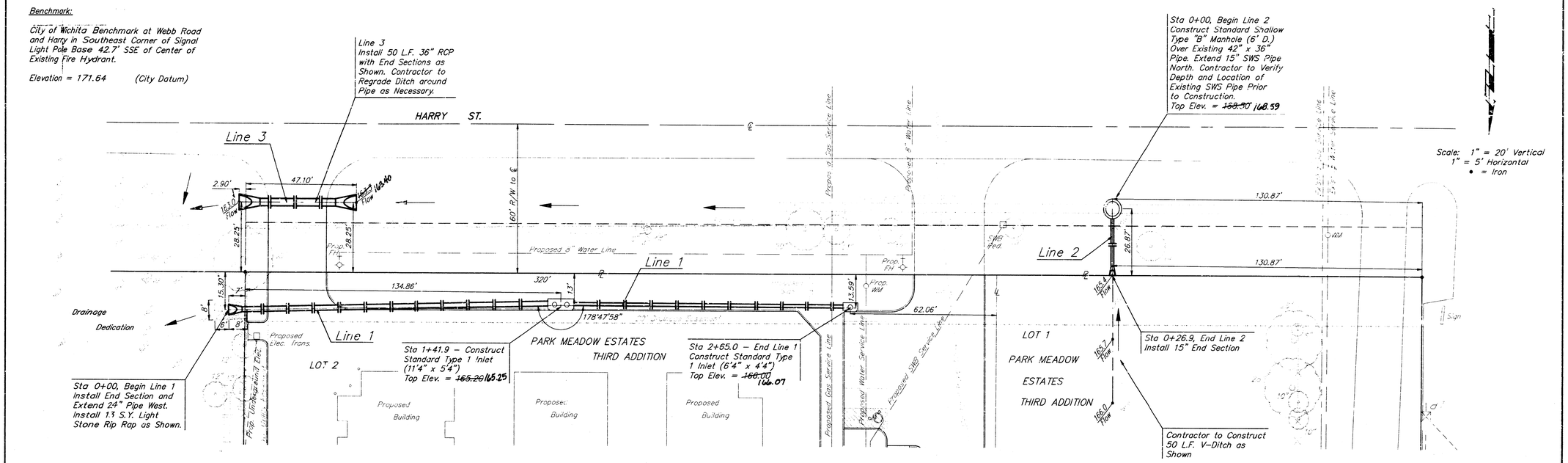
PROJECT INSPECTED BY BAUGHMAN COMPANY P.A.
ASBUILT 2/10/98 - BAUGHMAN COMPANY P.A. - TJY

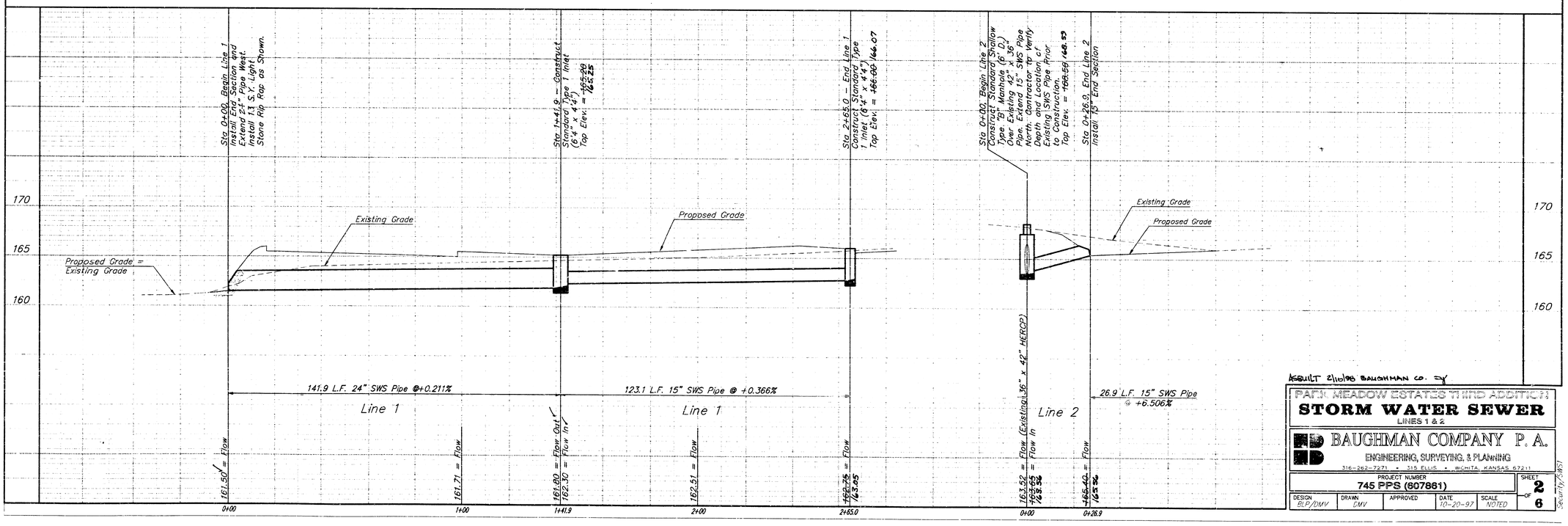

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Benchmark:

City of Wichita Benchmark at Webb Road and Harry in Southeast Corner of Signal Light Pole Base 42.7' SSE of Center of Existing Fire Hydrant.

Elevation = 171.64 (City Datum)




AS BUILT 2/10/98 BAUGHMAN CO. PA

PARK MEADOW ESTATES THIRD ADDITION

**STORM WATER SEWER**

LINES 1 & 2

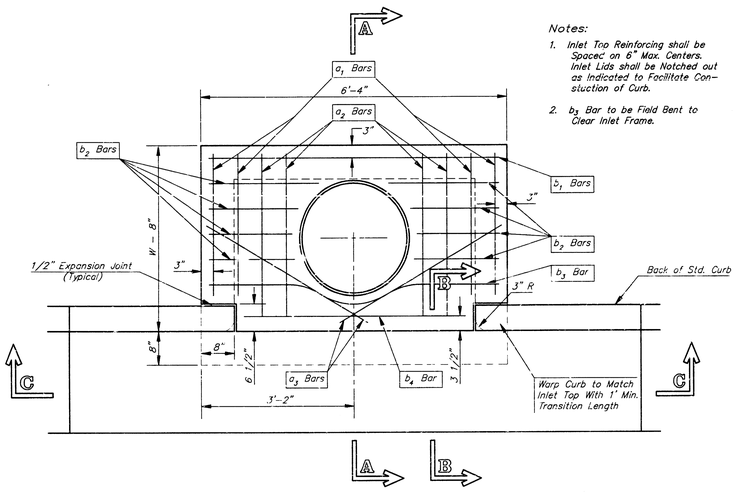
BAUGHMAN COMPANY P. A.

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| PROJECT NUMBER | | | | | SHEET |
|---|---|---|---|---|---|
| 745 PPS (607861) | | | | | 2 OF 6 |
| DESIGN | DRAWN | APPROVED | DATE | SCALE | |
| BLP/DMV | DMV | | 10-20-97 | NOTED | |

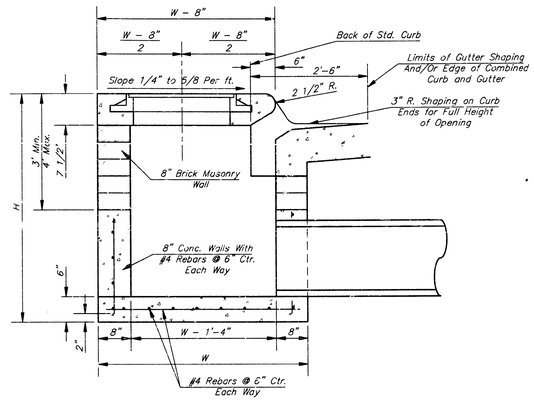
Security: SW-1



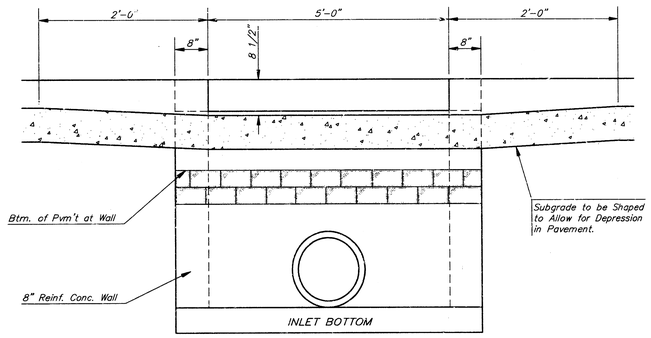

PLAN

Notes:

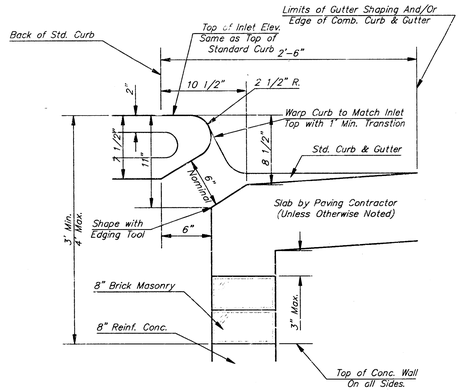
1. Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids shall be Notched out as Indicated to Facilitate Construction of Curb.
2. $b_2$ Bar to be Field Bent to Clear Inlet Frame.



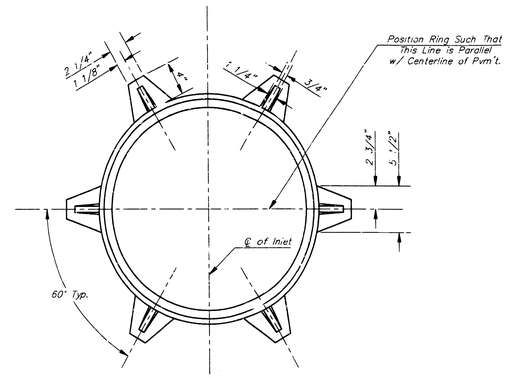

SECTION A-A

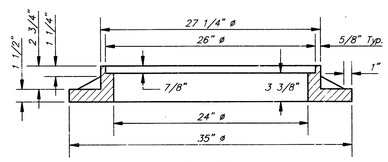



SECTION C-C




SECTION B-B

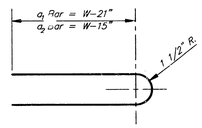



WT. = 180 lbs.

MANHOLE RING AND COVER

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.




BENDING DIAGRAM

STEEL SCHEDULE

| BAR | | $a_1$ | $a_2$ | $a_3$ | $b_1$ W=4'-4" | $b_1$ W=5'-4" | $b_1$ W=6'-4" | $b_1$ W=7'-4" | $b_1$ 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" | - | - | - | 8'-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: $a_3$ 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" | 5'-8" 6'-4" 7 1/2" | 21" & SMALLER | 0.38± |
| 5'-4" | 7'-8" 6'-4" 7 1/2" | 24" & 30" | 0.51± |
| 6'-4" | 5'-8" 6'-4" 7 1/2" | 36" & 42" | 0.64± |
| 7'-4" | 6'-8" 6'-4" 7 1/2" | 48" & 54" | 0.77± |
| 8'-4" | 7'-8" 6'-4" 7 1/2" | 60" & 66" | 0.90± |

GENERAL NOTES

1. 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.
2. 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.
3. 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.
4. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

Revised - Dec. 21, 1984

CITY OF WICHITA, KANSAS

# TYPE 1 CURB INLET

INLET OPENING = 8'X5'-0"

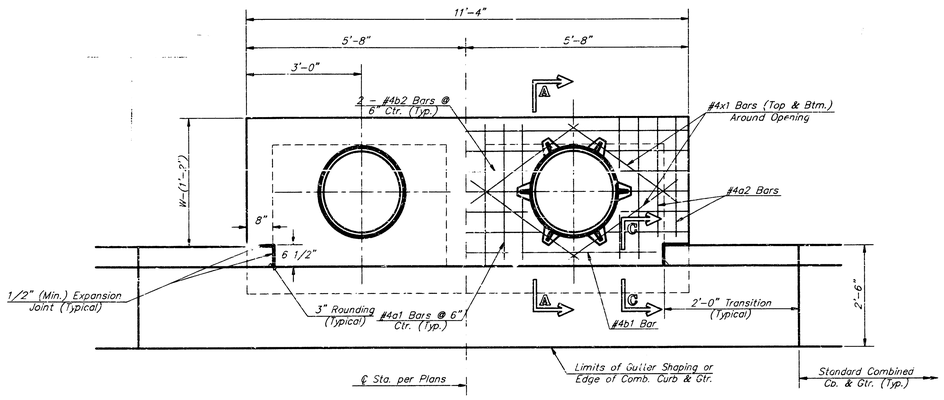

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PROJECT NUMBER 745 PPS (607801)

SHEET 3 OF 6

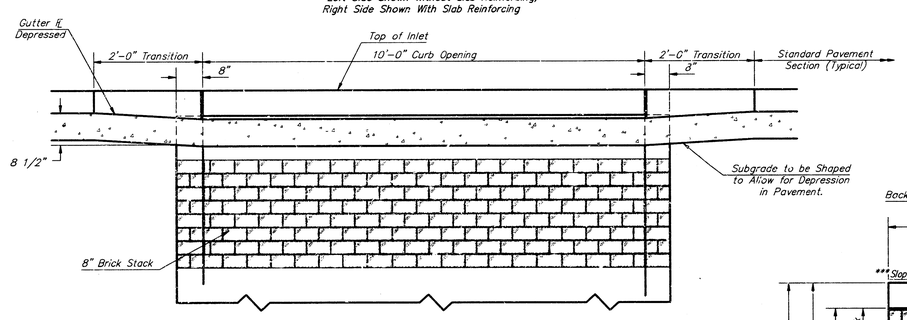
| DESIGN | DRAWN | APPROVED | DATE | SCALE |
|---|---|---|---|---|
| C.O.W. | STAFF | | | |

DETAILS/TYP-1

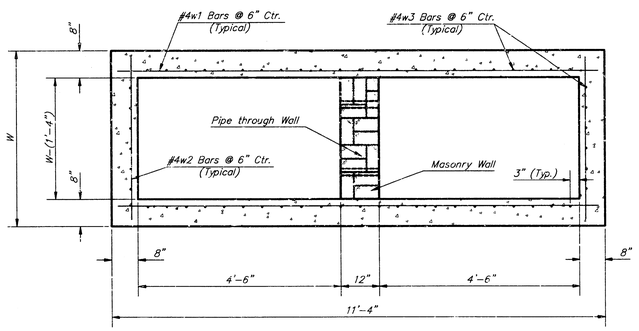



## PLAN

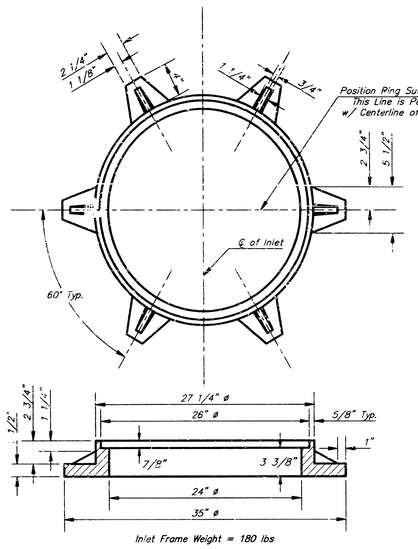
*Left Side Shown Without Slab Reinforcing, Right Side Shown With Slab Reinforcing




## ELEVATION



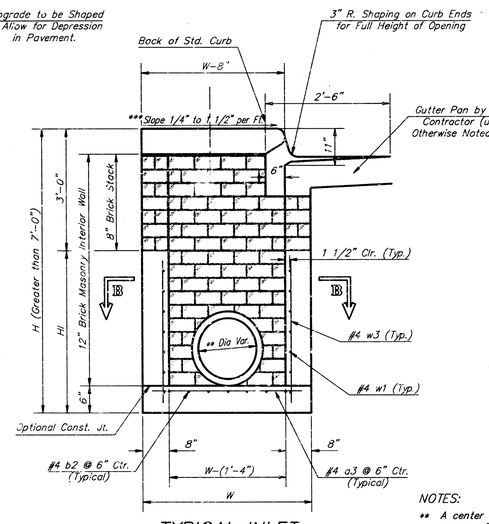

## SECTION B-B



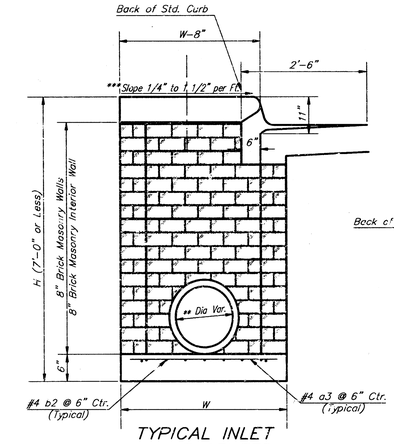

Inlet Frame Weight = 180 lbs

## MANHOLE RING AND COVER

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.




## TYPICAL INLET SECTION AT CENTER WALL (REINFORCED CONCRETE WALLS)

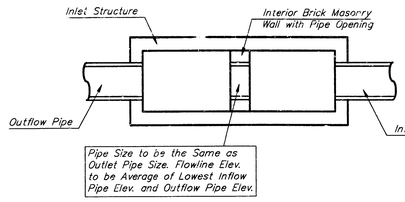



## TYPICAL INLET SECTION AT CENTER WALL (MASONRY WALLS)

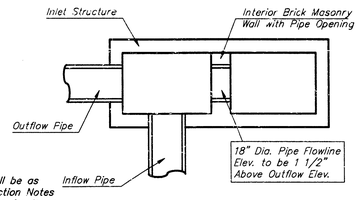
NOTES:

** A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II below.

*** Slope of inlet tops to match sidewalk of parking slopes with.in limits indictated

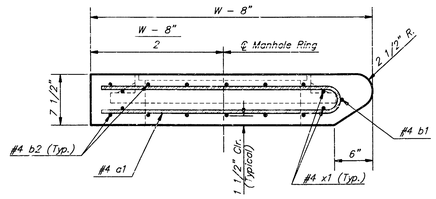



## CASE I

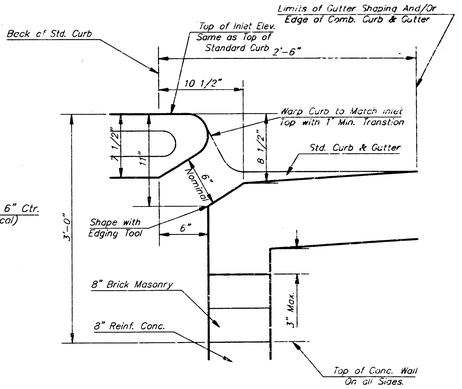



NOTE:
Center Wall Pipe Size shall be as Specified in Inlet Construction Notes on the Plan/Profile Sheets for those Cases not Shown Here.

## CASE II




## SECTION A-A

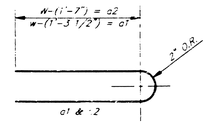



## SECTION C-C

| PRECAST SLAB AND FLOOR REINFORCING | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | W = 4'-4" | | W = 5'-4" | | W = 5'-4" | | W = 7'-4" | | W = 8'-4" | |
| MARK | SIZE | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH | NO. | LENGTH |
| a1 | #4 | 13 | 6'-7" | 13 | 8'-7" | 13 | 10'-7" | 13 | 12'-7" | 13 | 14'-7" |
| * a2 | #4 | 4 | 6'-0" | 4 | 8'-0" | 4 | 10'-0" | 4 | 12'-0" | 4 | 14'-0" |
| a3 | #4 | 23 | 4'-1" | 23 | 5'-1" | 23 | 6'-1" | 23 | 7'-1 | 23 | 8'-1" |
| b1 | #4 | 1 | 9'-9" | 1 | 9'-9" | 1 | 9'-9" | 1 | 9'-9" | 1 | 9'-9" |
| * b2 | #4 | 23 | 11'-1" | 29 | 11'-1" | 35 | 11'-1" | 41 | 11'-1" | 47 | 11'-1" |
| x1 | #4 | 15 | 3'-10" | 16 | 4'-2" | 16 | 4'-6" | 16 | 4'-10" | 16 | 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 | 11'-1" | ② | 11'-1" | ① | 11'-1" | ② | 11'-1" | ① | 11'-1" |
| w2 | #4 | ① | 4'-1" | ① | 5'-1" | ① | 6'-1" | ② | 7'-1" | ① | 8'-1" |
| w3 | #4 | 52 | ② | 56 | ② | 60 | ② | 64 | ② | 68 | ② |

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

| STANDARD CURB INLET PRECAST TOPS | | | |
|---|---|---|---|
| W | PRE-CAST TOP SIZE | PIPE SIZE | CU. YD. CONC. |
| 4'-4" | 3'-8" x 11'-4" x 7 1/2" | 21" & SMALLER | 0.83± |
| 5'-4" | 4'-8" x 11'-4" x 7 1/2" | 24" & 30" | 1.09± |
| 6'-4" | 5'-8" x 11'-4" x 7 1/2" | 36" & 42" | 1.35± |
| 7'-4" | 6'-8" x 11'-4" x 7 1/2" | 48" & 54" | 1.61± |
| 8'-4" | 7'-8" x 11'-4" x 7 1/2" | 60" & 66" | 1.07± |




## BENDING DIAGRAM

### GENERAL NOTES:

Concrete shall be C.O.W. standard paving mix. All exposed edges shall be finished with an edging tool. Reinforcing bars shall be field bent or cut to clear pipes and inlet rings. All bars are #4 bars @ 6" spacing and shall have a minimum clearance of 1 1/2" unless otherwise noted. Floors of inlet shall be shaped with 8 sack sand mix concrete to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipe(s). The contractor will be required to to construct 8" brick masonry walls between the inlet base and top on this inlet when H=7'-0" or less and W=5'-4" or less. When W is greater than 6'-4" and H is less than 7'-6", the outside inlet walls below the brick stack shall be reinforced concrete construction.

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.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

This detail is identical to the standard detail drawing except that the gutter transition length is increased from 2'-0" to 3'-6".

Revised - Feb. 16, 1999

CITY OF WICHITA STANDARD TYPE1

# CURB INLET DETAILS

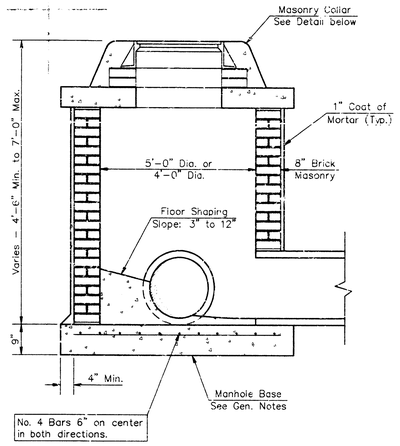
INLET OPENING = 5'-4" X 10'-0"

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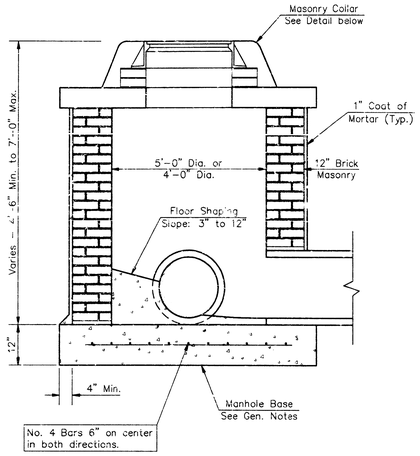
| PROJECT NUMBER | SHEET |
|---|---|
| 745 PPS (607881) | 4 OF 6 |

| DESIGN | DRAWN | APPROVED | DATE | SCALE |
|---|---|---|---|---|
| C.O.W. | STAFF | | | NONE |

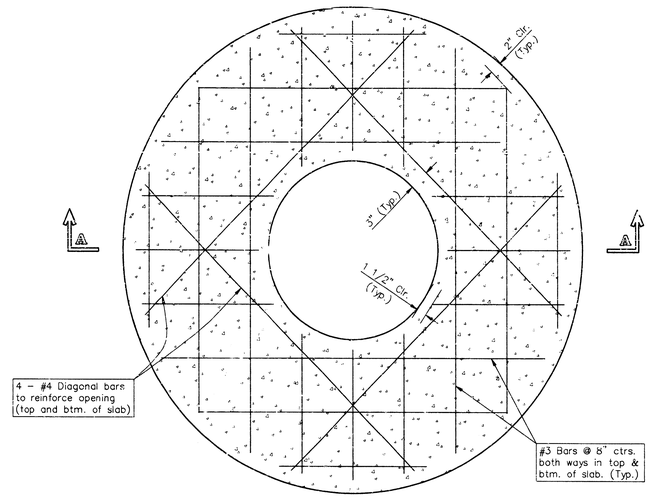
STNT1-0




SHALLOW TYPE "A" MANHOLE




SHALLOW TYPE "B" MANHOLE




PLAN

## 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 8" 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 mannole 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 mannole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.

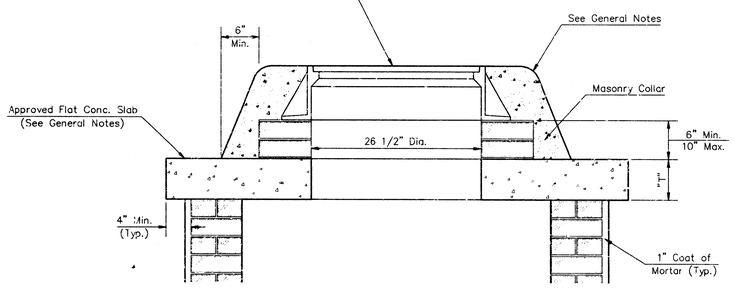
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain 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.

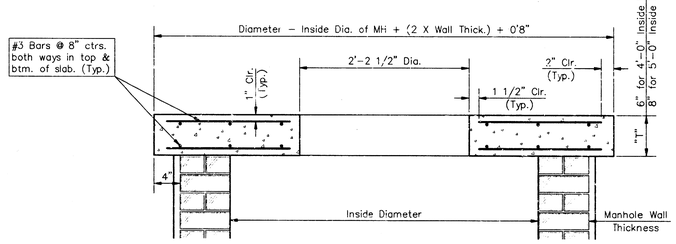
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

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.

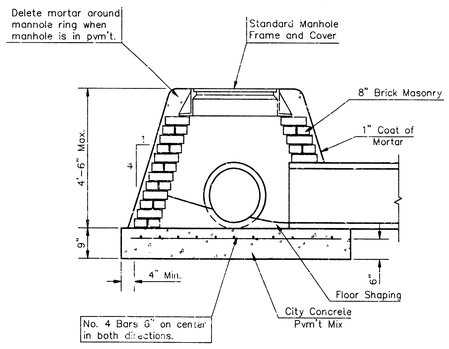



MASONRY COLLAR DETAIL

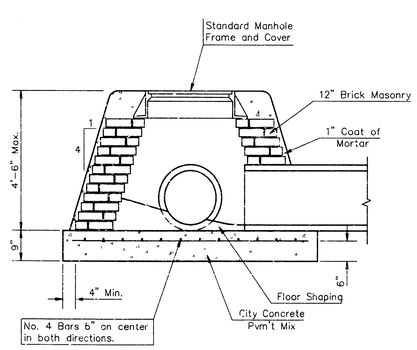



SECTION A-A

FLAT CONCRETE SLAB DETAILS




SPECIAL SHALLOW TYPE "A" MANHOLE




SPECIAL SHALLOW TYPE "B" MANHOLE

CITY OF WICHITA, KANSAS

# Std. Manhole Detail

TYPE "A" AND TYPE "B"

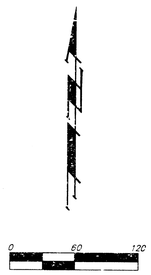
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

| PROJECT NUMBER | | | | SHEET |
|---|---|---|---|---|
| 745 PPS (607861) | | | | 5 OF 6 |
| DESIGN | DRAWN | APPROVED | DATE | SCALE |
| C.O.W. | Staff | | | NONE |

DETAILS\SHLMHH

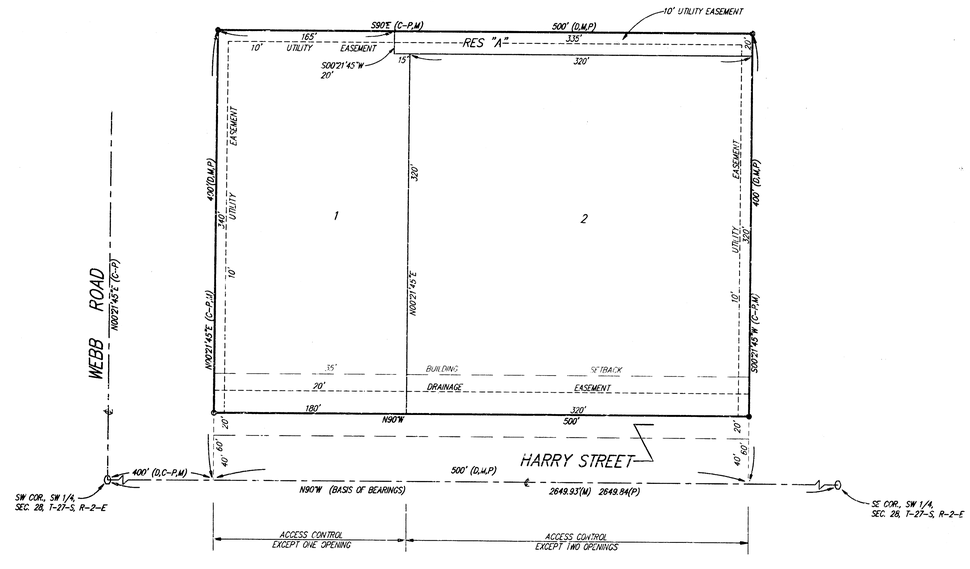
# PARK MEADOW ESTATES THIRD ADDITION

## WICHITA, SEDGWICK COUNTY, KANSAS




**LEGEND:**

(C-P) = CALCULATED PER PLATTED INFORMATION
(D) = DESCRIBED
(M) = MEASURED
(P) = PLATTED
● = ¼ REBAR W/ "BAUGHMAN" CAP(SET)
○ = ¼ REBAR (FOUND)
0 = THIMBLE (FOUND)




State of Kansas) SS
Sedgwick County)

We, Baughman Company, P.A. Surveyors in aforesaid County and State do hereby certify that we have surveyed and platted "PARK MEADOW ESTATES THIRD ADDITION", Wichita, Sedgwick County, Kansas, and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows:

Commencing at the Southwest corner of the Southwest Quarter of Section 28, Township 27 South, Range 2 East of the Sixth Principal Meridian, Sedgwick County, Kansas; thence East along the South line of said Southwest Quarter, 400 feet for a point of beginning; thence North parallel with the West line of said Southwest Quarter, 400 feet; thence East parallel with the South line of said Southwest Quarter, 500 feet; thence South parallel with the West line of said Southwest Quarter, 400 feet to a point on the South line of said Southwest Quarter; thence West along the South line of said Southwest Quarter; 500 feet to the point of beginning.

Existing public easements and dedications being vacated by virtue of K.S.A. 12-512(b).

Baughman Company, P.A.

_____, Surveyor
Michael G. Conrey

Know all men by these presents that we, the undersigned, have caused the land in the surveyors certificate to be platted into Lots and a Street to be known as "PARK MEADOW ESTATES THIRD ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage easement is hereby granted as indicated for drainage purposes. Reserve "A" is hereby reserved for a landscape buffer, open space, landscaping, berms, and utilities as confined to easement. Reserve "A" shall be owned and maintained by the owner of Lot 2. All abutters rights of access to or from Harry Street over and across the south line of Lots 1 and 2 are hereby granted to the City of Wichita, Kansas provided, however, that said Lot 1 shall have access to Harry Street at one location and said Lot 2 shall have access to Harry Street at two locations, all as shall be determined by the City Engineer for the City of Wichita, Kansas.

_____
Orlin E. Ard, Jr.

State of Kansas) SS
Sedgwick County)

The foregoing instrument acknowledged before me, this _____ day of _____, 1997, by Orlin E. Ard Jr., a single person.

_____ Notary Public

My App't. Exp. _____

This plat of "PARK MEADOW ESTATES THIRD ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ____ day of _____, 1997.

Wichita-Sedgwick County Metropolitan Area Planning Commission

_____, Chairman
John C. Frye

_____, Secretary
Marvin S. Krout

This plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this ____ day of _____, 1997.

_____, Mayor
Bob Knight

_____, City Clerk
Pat Burnett

Entered on transfer record this _____ day of _____, 1997.

_____, County Clerk
James Alford

State of Kansas) SS
Sedgwick County)

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this ___ day of _____, 1997, at ____ o'clock ___M; and is duly recorded.

_____, Register of Deeds
Larry Consolver

_____, Deputy
Michael D. Hurtt

20 JUNE 1997

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211
PROJECT NO. 96-SUB-100 (PARKMEADOW3.DWG, MC)

97 02 03 03 6/6