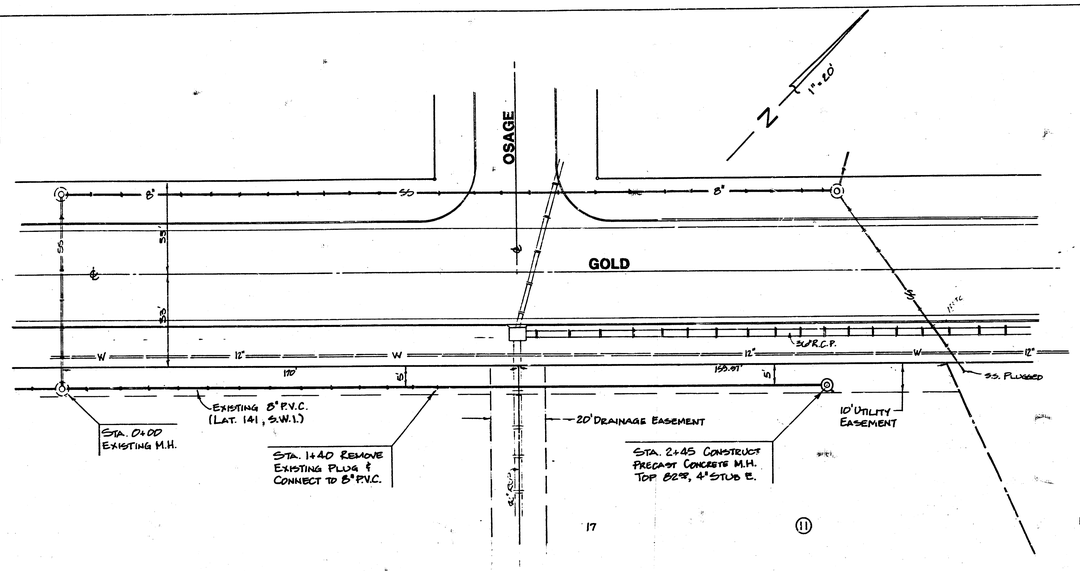
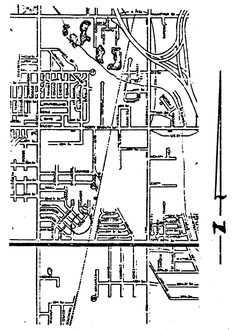
BENCH MARKS:
CITY OF WICHITA DISC, 45' N. & 45' W. OF ¼ COR. @ 55TH & GOLD, ELEV. 81.36

"X" IN BOLT OF F.H. @ W. COR. SYCAMORE & GOLD, ELEV. 82.43





LOCATION MAP

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA
Sanitary Sewers 308 4/24/02
Storm Sewers _____
Driveway Approaches _____

NOTE TO CONTRACTOR

This project will be constructed under the supervision of the CITY ENGINEER and conforming to the SPECIFICATIONS of the CITY OF WICHITA. The CONTRACTOR will pay the City of Wichita for all costs of [illegible] inspection and bonding per contract.

PLAN
SURVEYED
PLOTTED
ASSIGNMENT CHECKED
NOTE BOOK
No.
BY OF WAY CHECKED
DATE
BY
DESCRIPTION

PROFILE
SURVEYED
PLOTTED
HORIZ. CHECKED
VERT. CHECKED
NOTE BOOK
No.
DESCRIPTION
DATE
BY

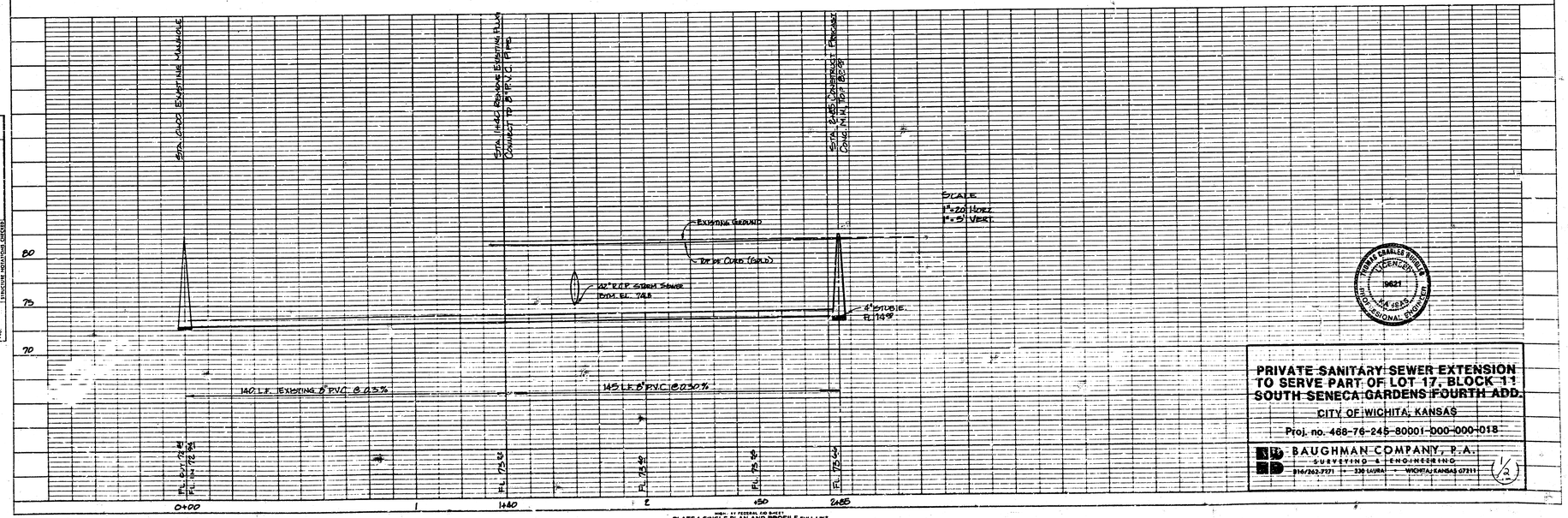


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE
"BY TELEDYNE"
PRINTED IN U.S.A.

THOMAS CHARLES BURGESS
LICENSED
19621
PROFESSIONAL ENGINEER

PRIVATE SANITARY SEWER EXTENSION TO SERVE PART OF LOT 17, BLOCK 11 SOUTH SENECA GARDENS FOURTH ADD.

CITY OF WICHITA, KANSAS

Proj. no. 468-76-245-80001-000-000-018

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-2721 — 330 LAURA — WICHITA, KANSAS 67211

12

GENERAL NOTES

CONCRETE USED IN CONCRETE 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. ALL INSIDE SURFACES OF THE MANHOLE WALL WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE PROTECTED BY COATING SUCH SURFACES WITH TWO COATS OF SERIES 66 HI-BUILD EPOLINE AS MANUFACTURED BY TENEMAC OR APPROVED EQUAL. EACH COAT SHALL HAVE A DRY FILM THICKNESS OF BETWEENN 4 TO 6 MILS. SUCH COATING SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASE. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. REINFORCING STEEL SHALL BE PLACED 3" ABOVE THE BOTTOM OF THE MANHOLE BASE.

PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE ENCASED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE ENCASEMENT SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. ENCASEMENT SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXABILITY OF THE JOINT. COST OF ENCASEMENT WITHIN MANHOLE EXCAVATION OF TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

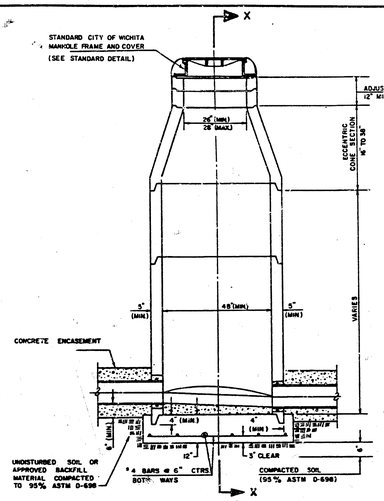
ALL PIPE GROUTING SHALL BE DONE WITH NON-METALIC SHRINKAGE CORRECTING GROUTS SUCH AS MASTER BUILDER'S "EMBECO 713"; SET PRODUCTS INC. "SET"; OR AN APPROVED EQUAL. THE GROUTED INLET PIPE CONNECTION SHALL BE SEALED ON THE EXTERIOR WITH BITUMASTIC SUPER SERVICE BLACK AS MANUFACTURED BY KOPPERS, TARMASTIC 103 AS MANUFACTURED BY UNITED STATES STEEL, 450 HEAVY TENEMECOL AS MANUFACTURED BY TENNEMEC OR AN APPROVED EQUAL. APPLICATION SHALL CONFORM TO MANUFACTURER'S REQUIREMENTS.

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 INCOMING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP CHANNELS 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.

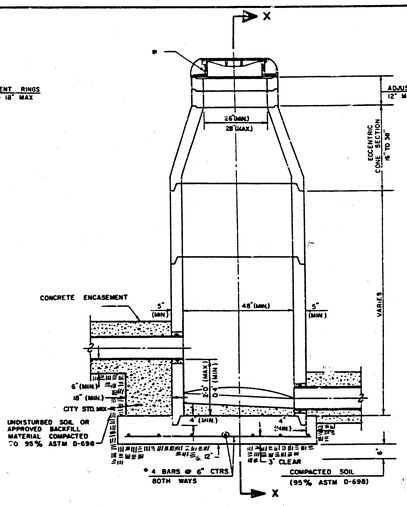
MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.

THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 1' 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.

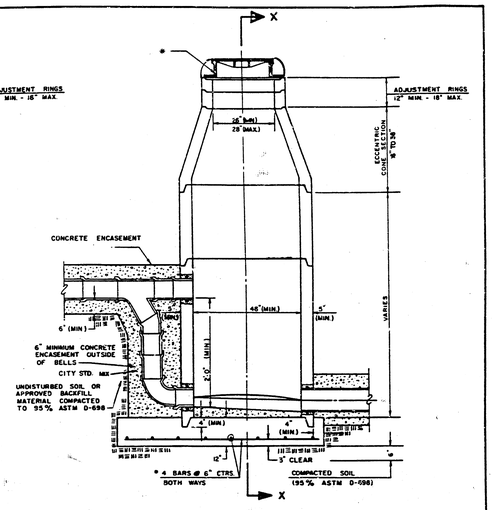
BUTYL-RUBBER JOINT SEALER SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.



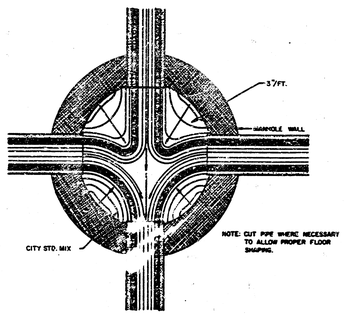
PRECAST
STANDARD MANHOLE



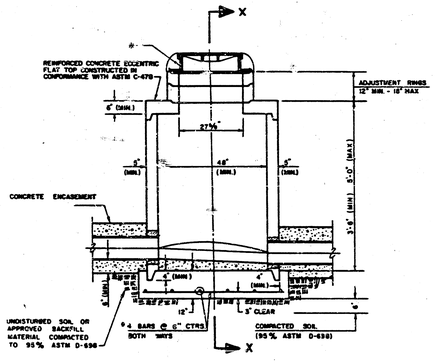
PRECAST
INSIDE DROP MANHOLE



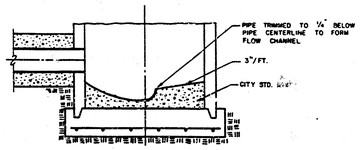
PRECAST
OUTSIDE DROP MANHOLE



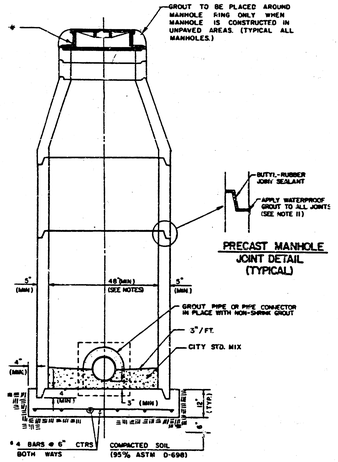
TYPICAL MANHOLE
FLOOR SHAPING



PRECAST
SHALLOW MANHOLE



SECTIONAL ELEVATION - INVERT



PRECAST MANHOLE
JOINT DETAIL
(TYPICAL)

SECTION X
(TYPICAL)

PRECAST MANHOLE NOTES

1. IF, IN THE OPINION OF THE ENGINEER, THE TRENCH BOTTOM AFFORDS SUFFICIENT SUPPORT, THE ENGINEER MAY WAIVE THE USE OF TO COMPACT SUBGRADE AS SHOWN BY INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
3. STEEL REINFORCING IS REQUIRED IN ALL MANHOLE BASES.
3. APPROVED FLEXIBLE WATERTOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM C-923 SHALL BE INSTALLED TO JOIN THE STUBS TO THE MANHOLE WALL WHEN AN COMPOSITE PIPE OR PVC PIPE IS USED.
4. PIPE PLUGS SHALL BE PROVIDED BY PIPE SUPPLIER WHEN AVAILABLE.
5. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
6. 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.
7. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C478 AS MODIFIED BY THE SPECIFICATIONS.
8. CONCRETE FOR MANHOLE BASES SHALL BE AS DESCRIBED IN THE SPECIFICATIONS.
9. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
10. MANHOLES WITH PIPE SIZES LARGER THAN 15" SHALL HAVE 5" INSIDE DIAMETER RISERS.
11. WATERPROOF GROUT FOR PRECAST JOINTS SHALL BE PREPARED WITH THE PROPORTIONS LISTED BELOW, OR ACCORDING TO POLYMER MANUFACTURER'S RECOMMENDATIONS IF APPROVED BY THE ENGINEER.

MATERIAL	PARTS BY WEIGHT
ACRYLIC POLYMER*	27
PORTLAND CEMENT	100
WATER	15
SAND	150

* ACRYL-60 BY "VONG-SEAL, ACRYLIC CRETE-1" BY LARSEN PRODUCTS CORP., OR APPROVED EQUAL.

No.	Revision	By	Date

DETAIL
PRECAST CONCRETE MANHOLE
CITY OF WICHITA, KANSAS

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

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