RECONSTRUCTION OF STORM WATER SEWER

AT

ELIZABETH AND BURTON

Project No.

468-76-245-82082-000-000-001

Index Code

132225

182667

CITY OF WICHITA, KANSAS

Michael E. Lindebak City Engineer

GENERAL NOTES

1. Interurban traffic generated outside the project area and local business or apartment traffic generated within the project area are to be carried through construction as further promulgated by project special provisions.

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. 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.

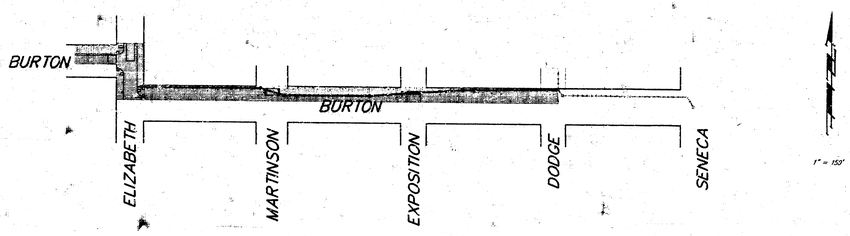
3. A saw cut of at least one-half the depth of existing surface courses or one-fourth the depth of the existing total pavement thickness shall be provided at locations where proposed construction abuts an existing surface course or pavement for which partial removal of that surface or pavement is required, except when such saw cuts are within three (3) feet of an existing joint the removal shall be extended to the existing joint. Such saw cuts will not be paid for directly and this cost shall be considered as subsidiary to the removal of the surface or pavement.

4. 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.

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 directly abbutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.

7. 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 law.



SHEET INDEX

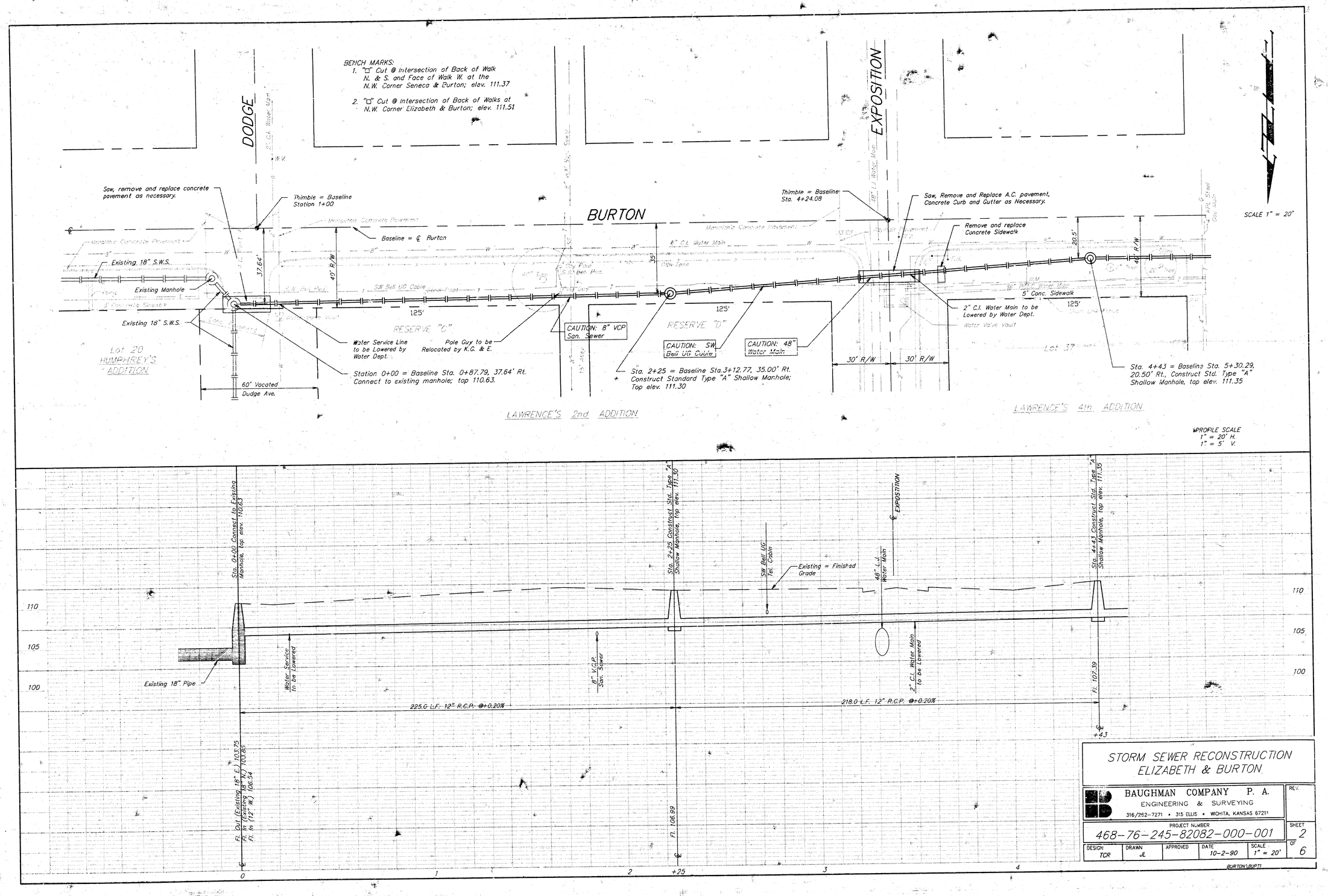
1 TITLE SHEET
2-3 PLAN AND PROFILE
4 PAVEMENT REPLACEMENT PLAN
5 SHALLOW MANHOLE DETAILS
6 VALLEY GUTTER DETAILS

THOMAS CHARLES BURGESS LICENSED 9827 KANSAS PROFESSIONAL ENGINEER

Booked 12/91 MCG

10-15-90

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



STORM SEWER RECONSTRUCTION
ELIZABETH & BURTON

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
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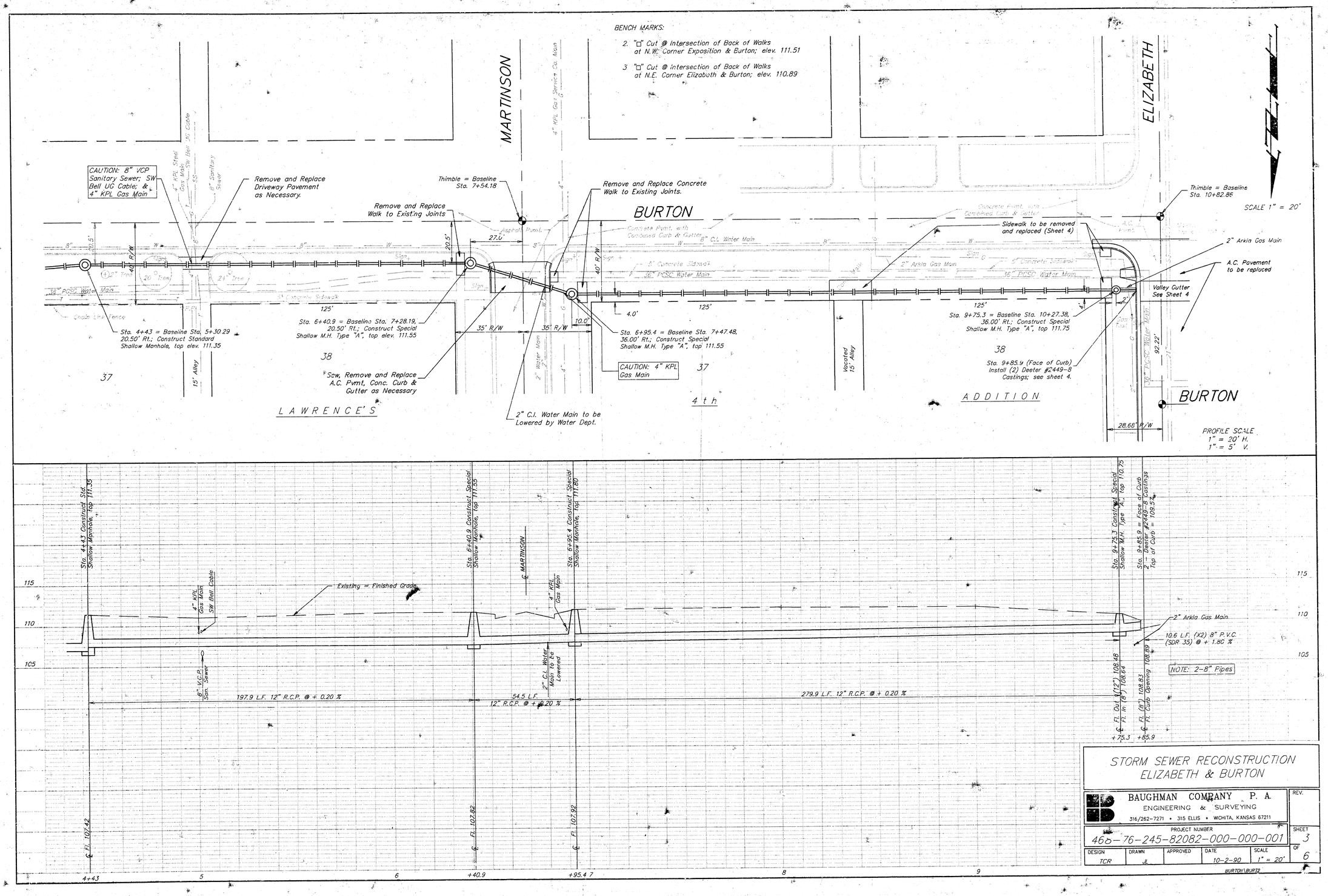
PROJECT NUMBER	REV.
468-76-245-82082-000-001	SHEET 2 OF 6

DESIGN	DRAWN	APPROVED	DATE	SCALE
TCR	JL		10-2-90	1" = 20'

BURTON\BUPT1



STORM SEWER RECONSTRUCTION
ELIZABETH & BURTON

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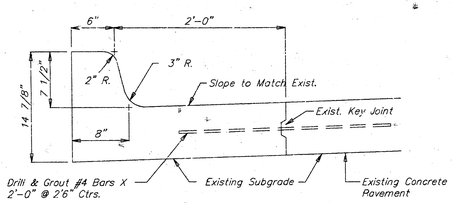
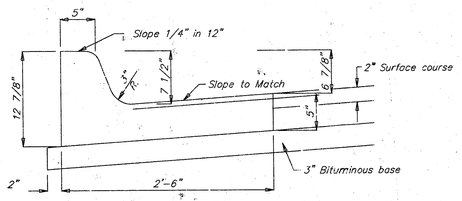
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER					REV.
468-76-245-82082-000-000-001					SHEET 3 OF 6
DESIGN TCR	DRAWN JL	APPROVED	DATE 10-2-90	SCALE 1" = 20'	

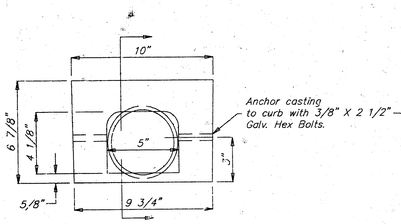
BURTON\BURT2



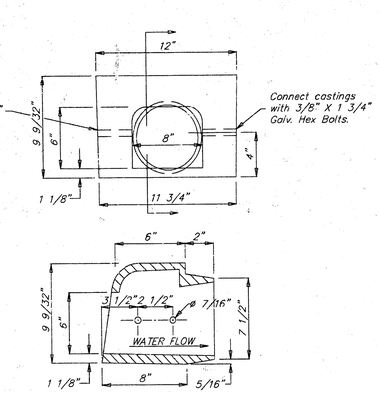
NON-STANDARD COMBINED CURB & GUTTER WITH CONCRETE PAVEMENT



NON-STANDARD COMBINED CURB & GUTTER (WITH A.C. PVMT)

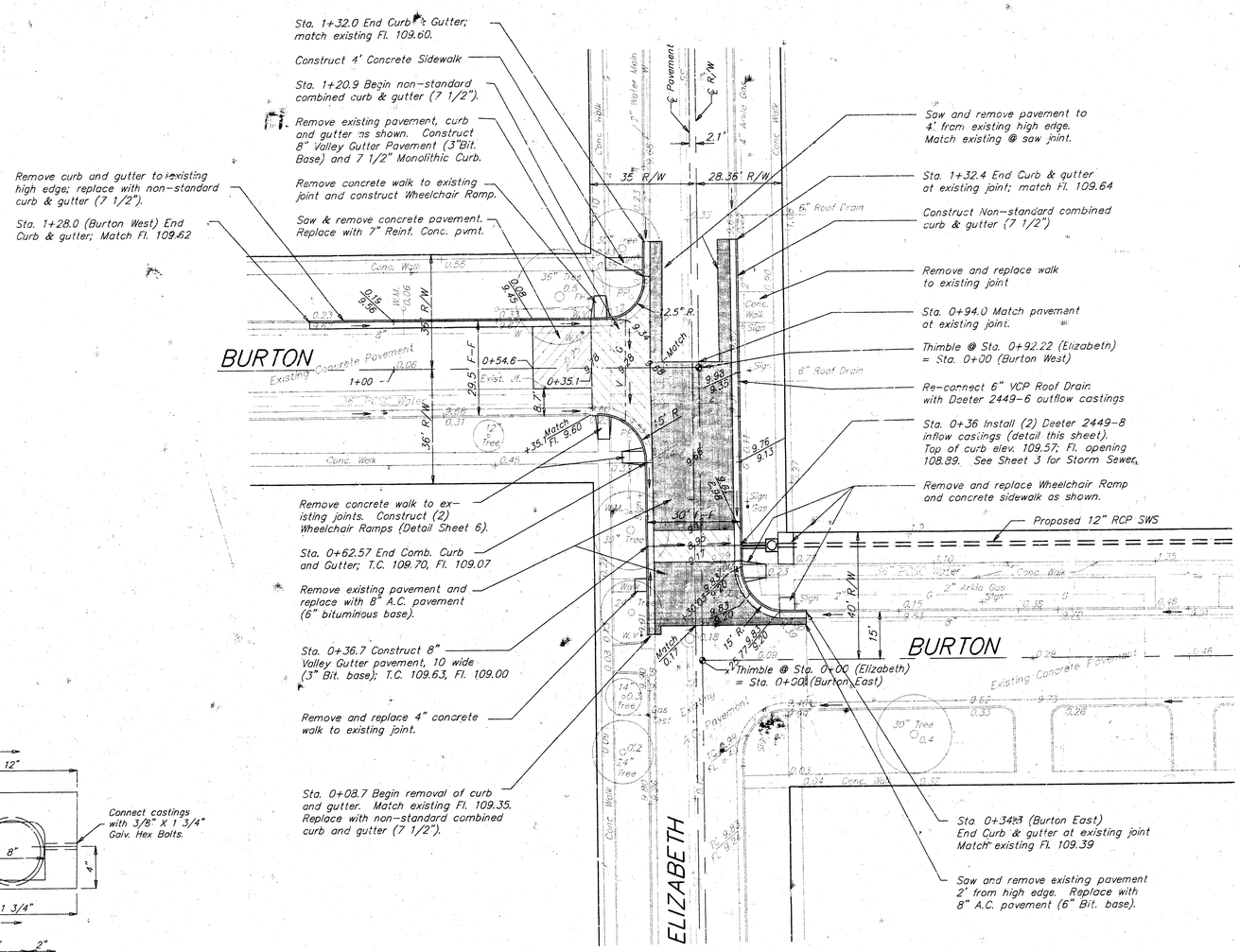


DETAIL DEETER #2449-6 CURB OUTFLOW CASTING



DETAIL DEETER #2449-8 CURB INFLOW CASTING

NOTE: Exposed parts of castings are to be painted gray color to match concrete curb, using primer/topcoat system suitable for cast iron, per mfgr. recommendations.



SCALE 1"=20'

NOTE: See Sheet 6 for Valley Gutter Details and Joint Plan

LEGEND

- 8" Asphaltic Concrete (6" Bituminous Base)
- 7" Reinforced Concrete Pavement
- 8" Valley Cutter Pavement (5" Reinforced Concrete with 3" Bituminous Base)

ACAD10\BURTON\ELBURT

PAVEMENT REPLACEMENT

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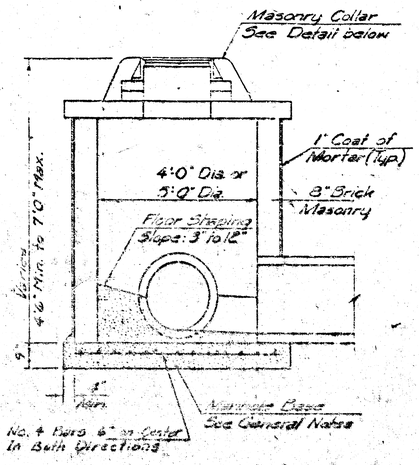
REV.

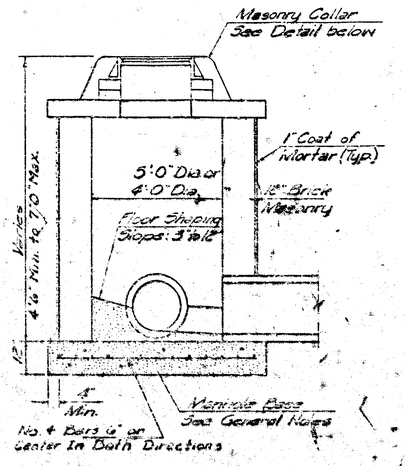
PROJECT NUMBER 468-76-245-82082-000-000-001

SHEET 4 OF 6

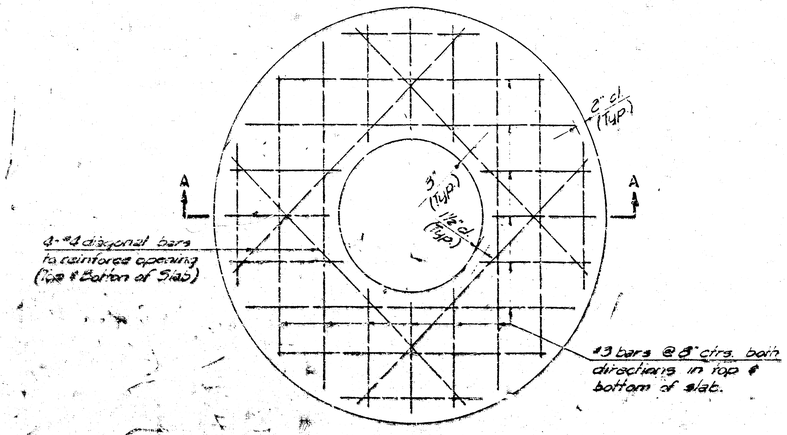
DESIGN	DRAWN	APPROVED	DATE	SCALE
TCR	TCR		9-27-90	1" = 20'



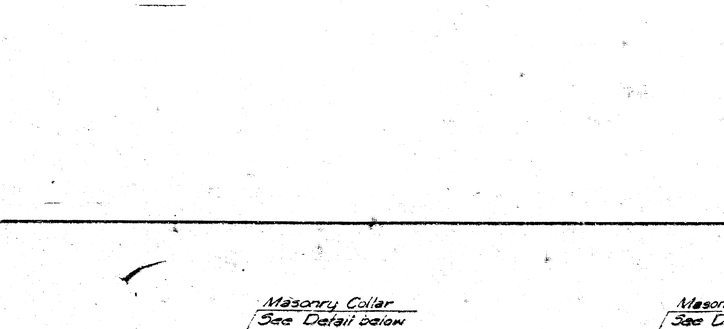
SHALLOW TYPE "A" MANHOLE



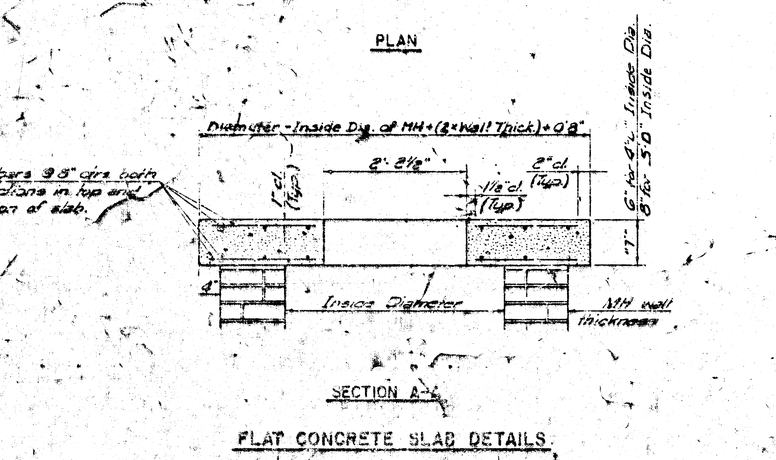
SHALLOW TYPE "B" MANHOLE



PLAN



MASONRY COLLAR DETAIL



SECTION A-A

FLAT CONCRETE SLAB DETAILS

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.

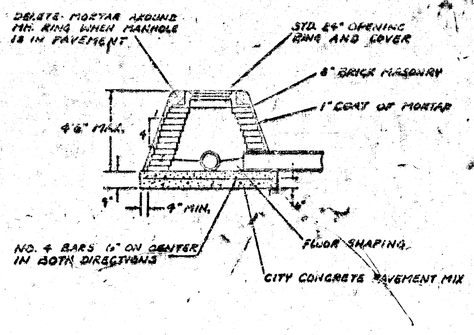
3. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE 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.

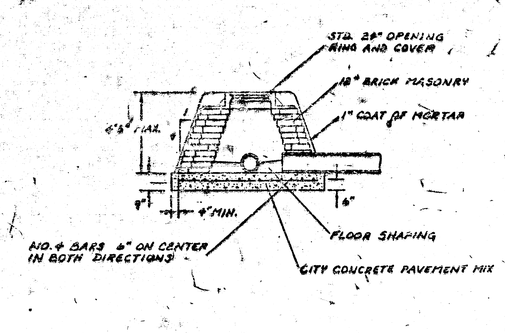
5. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWINGS.

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.



SPECIAL SHALLOW TYPE 'A' MANHOLE

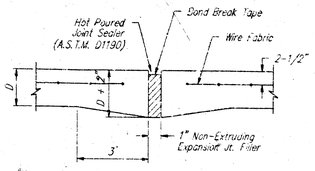


SPECIAL SHALLOW TYPE 'B' MANHOLE

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B' 5
6

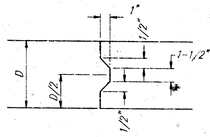
480-78-245-82082-000-000-001

Designed by		Checked by	
Drawn by		Date	Job No.

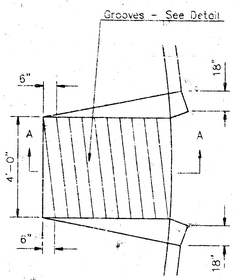


EXPANSION JOINT

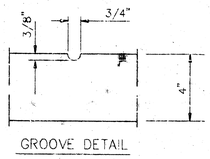
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



KEYWAY DETAIL

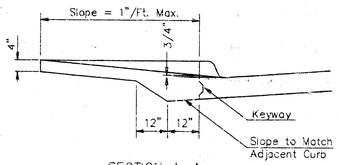


WHEELCHAIR RAMP PLAN VIEW

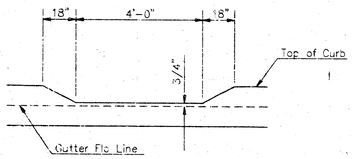


GROOVE DETAIL

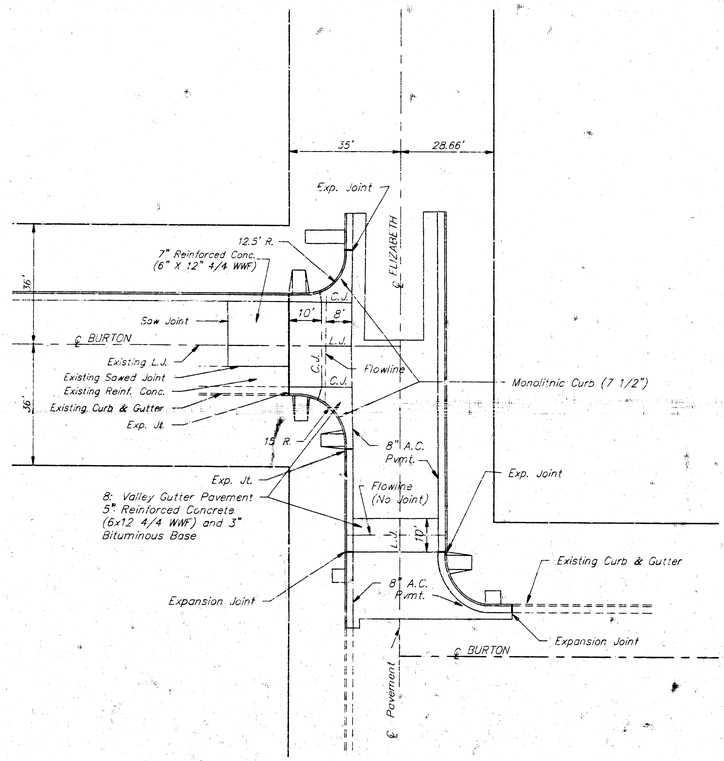
WHEELCHAIR RAMP DETAIL



SECTION A-A

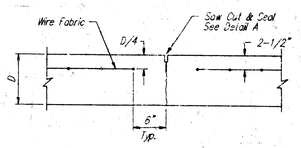


DEPRESSED CURB DETAIL

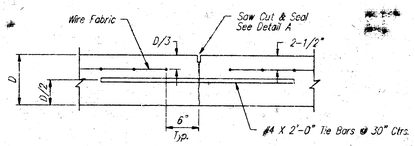


VALLEY GUTTER JOINT PLAN

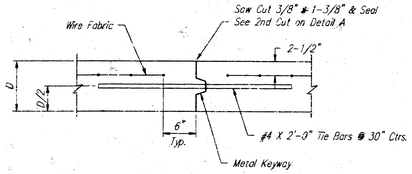
1" = 20'



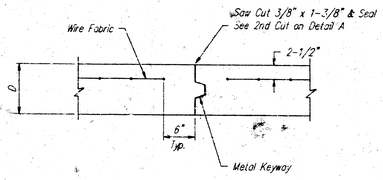
CONTRACTION JOINT DETAIL (C.J.)



LONGITUDINAL JOINT DETAIL (L.J.)

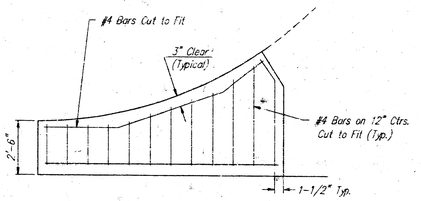


LONGITUDINAL JOINT DETAIL (L.J.)

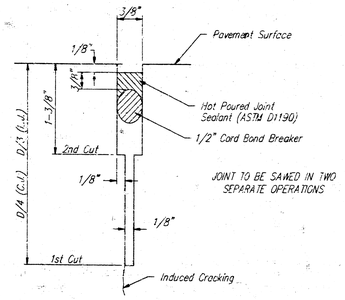


OPTIONAL CONTRACTION CONST. JOINT (C.J.)

(ALTERNATE C.J.)



WING REINFORCING DETAIL



SAW JOINT DETAIL

VALLEY GUTTER DETAILS

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316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

REV.

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SHEET 6 OF 6

DESIGN:	DRAWN	APPROVED	DATE	SCALE
CMB\TCR	CMB\JL		10-4-90	1" = 20'

BURTON\VGDETAIL