

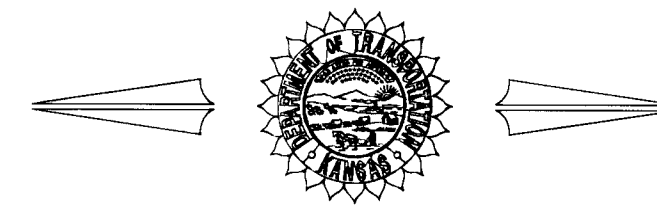
FHWA REG NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	15-87 K-8014-01	2002	1	21

PROJ. NO. 15-87 K-8014-01

GRADING
SURFACING
SODDING
SIGNING
EROSION CONTROL

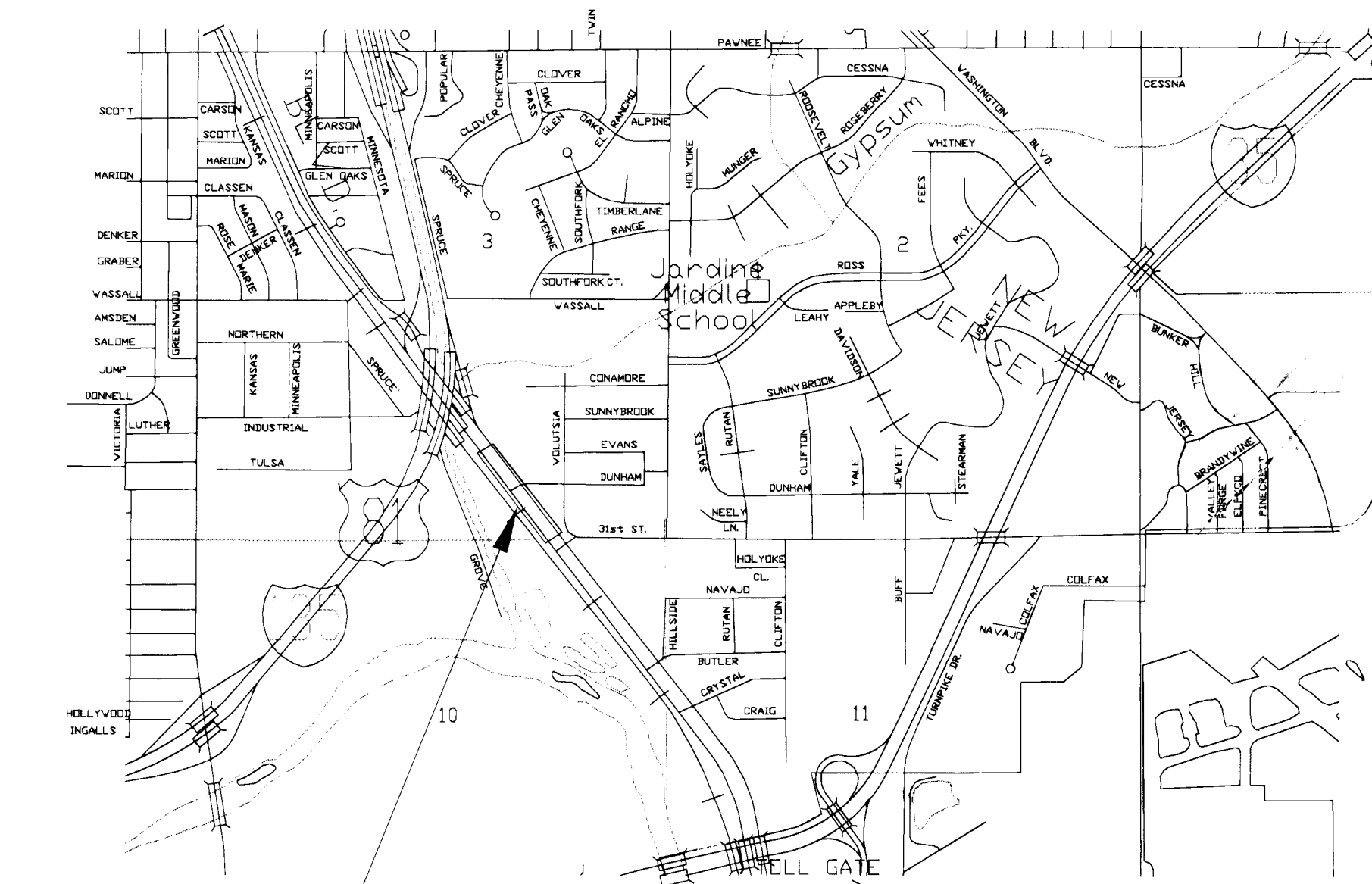
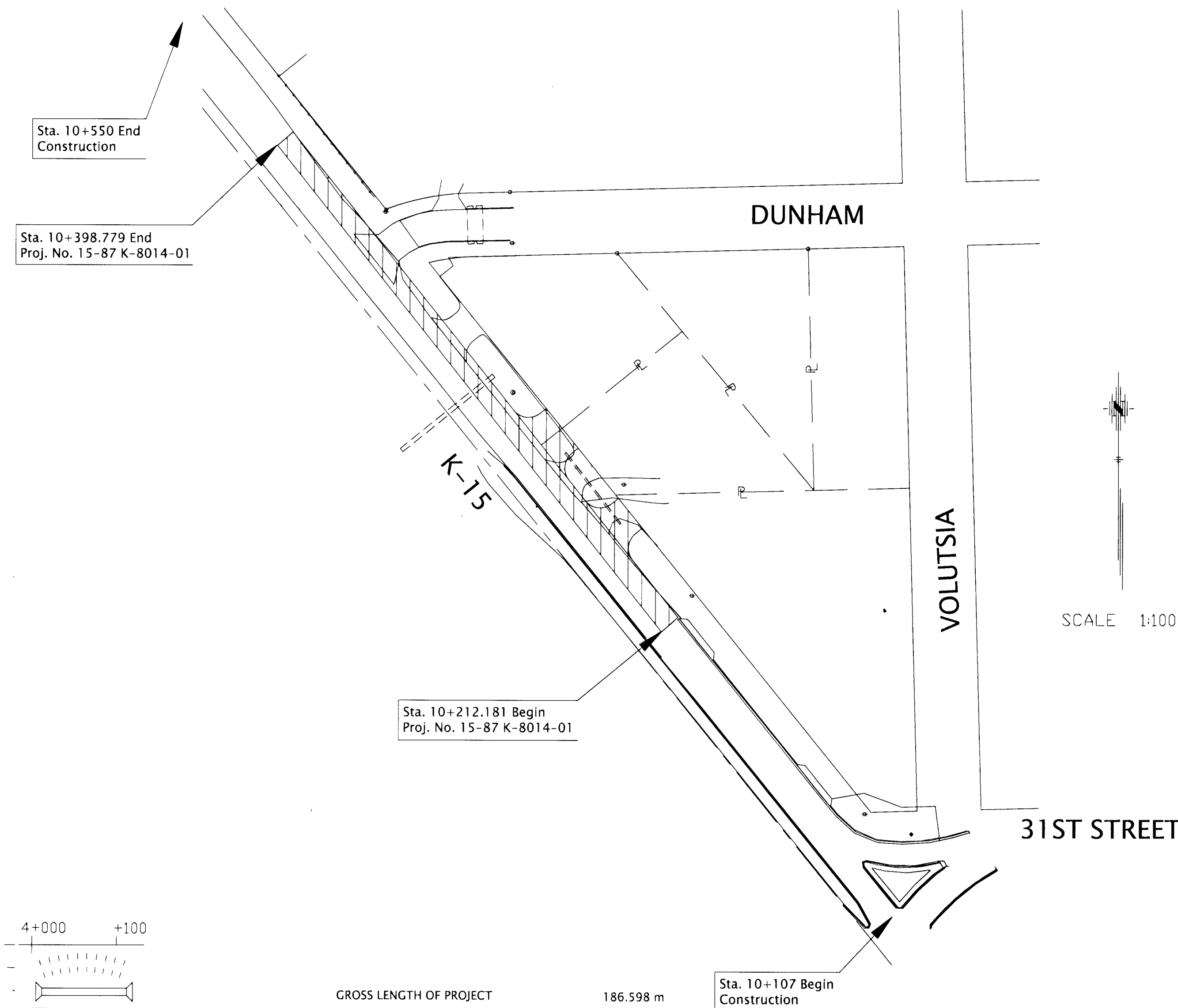
SHEET NO.	DESCRIPTION
1	Title Sheet
2	Typical Sections
3-4	Plan Sheets
5	Sewer Profile
6-7	Drainage Structure Details
8	Concrete End Sections
9	Erosion Control
10-15	Traffic Control
16	Summaries of Quantities – Signs
17	Summaries of Quantities
18-21	Cross Sections
R-1	RESURFACING COVER SHEET
R-2	RESURFACING TYPICAL SECTION AND GENERAL NOTES

STATE OF KANSAS DEPARTMENT OF TRANSPORTATION



PLAN AND PROFILE OF PROPOSED CITY PROJECT #472 83363 OCA #706815 K-15 FROM 31ST STREET SOUTH TO I-135

WICHITA, SEDGWICK COUNTY
POPULATION: 310,238



Project Location

LOCATION MAP

DESIGN DESIGNATION

AADT (2003)	=	38,200
AADT (2023)	=	51,000
DHV	=	10%
D	=	60%
T	=	3%
V	=	80 k/hr.
CONTROL OF ACCESS	=	NONE
CLEAR ZONE	=	6.5 m

CONVENTIONAL SIGNS

COUNTY LINE	----	CENTER LINE OF PROJECT	----
CITY LIMITS	----	TERRACE	----
STATE OR NATIONAL LINE	----	CULVERTS	----
TOWNSHIP, SECTION or GRANT LINE	----	DROP INLET & STORM SEWER	----
PROPERTY LINE	----	ACCESS CONTROL	----
HIGHWAY FENCE	----	POWER POLE	----
EXISTING FENCE	----	TELEPHONE POLE	----
GUARD FENCE	----	MARSH	----
CONSTRUCTION LIMITS	----	HEDGE	----
RIGHT OF WAY LINE	----	TREES	----
TRAVELED WAY	----	PROFILE ELEVATION	----
RAILROADS	----	STREAM or CREEK	----

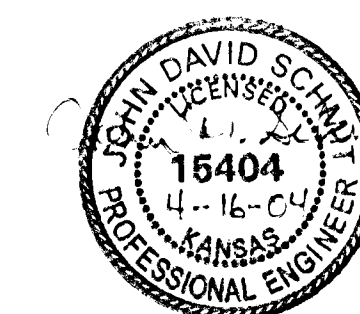
GROSS LENGTH OF PROJECT	186.598 m
EXCEPTIONS	0.000 m
ADDITIONS	0.000 m

NET LENGTH OF PROJECT	186.598 m
NET LENGTH OF BRIDGES	0.000 m
NET LENGTH OF ROAD	186.598 m

PREPARED & SUBMITTED BY
SCHWAB-EATON, P.A.
WICHITA, KANSAS

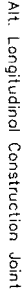
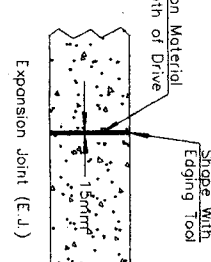
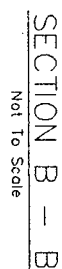
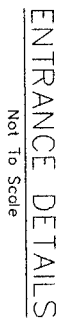
All dimensions shown without a
Suffix are in millimeters. All
elevations shown are in meters.

KDOT
METRIC

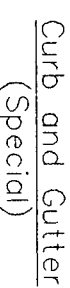
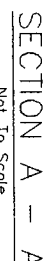
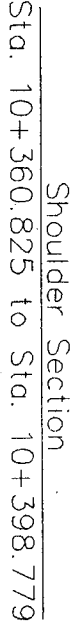


APPROVED - DATE 4-21-04
James L. Armour
JAMES L. ARMOUR, P.E.
CITY ENGINEER
PROJECT NO. 472 83363

CITY OF WICHITA
TYPICAL SECTIONS
WICHITA, KANSAS



1. ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTLINE OF DRIVEWAYS HAVING A WIDTH OF 7.6 m OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED ALONG DRIVEWAYS 7.6 TO 10.3 m WIDE. DRIVEWAYS WITH A WIDTH DIMENSION GREATER THAN 7.6 m SHALL BE LIMITED FROM THE 3.0 m CONTRACTION JOINT ALONG THE BACK OF CURB TO THE DRIVEWAY. DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CURB AND STREET PAVEMENT CONSTRUCTION.
2. DRIVEWAYS SHALL BE CONSTRUCTED IN CONJUNCTION WITH NEW CURB AND STREET PAVEMENT CONSTRUCTION.
3. 15.0 mm EXPANSION JOINTS SHALL BE INSTALLED ALONG THE PROPERTY LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ABUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXPANSION.
4. ALL DRIVEWAYS SHALL BE A MINIMUM OF 200 mm IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS SHALL BE CONSTRUCTED WITH 150 mm X 300 mm MASONRY BLOCKS WITH FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCURRENCE.



CHECKED BY:	CM
DRAWN BY:	DJC
DATE:	OCTOBER 7, 2002
SHEET NUMBER:	2
TOTAL SHEETS:	21

SCALE 1:20

- P.O.T. Sta. 10-2860

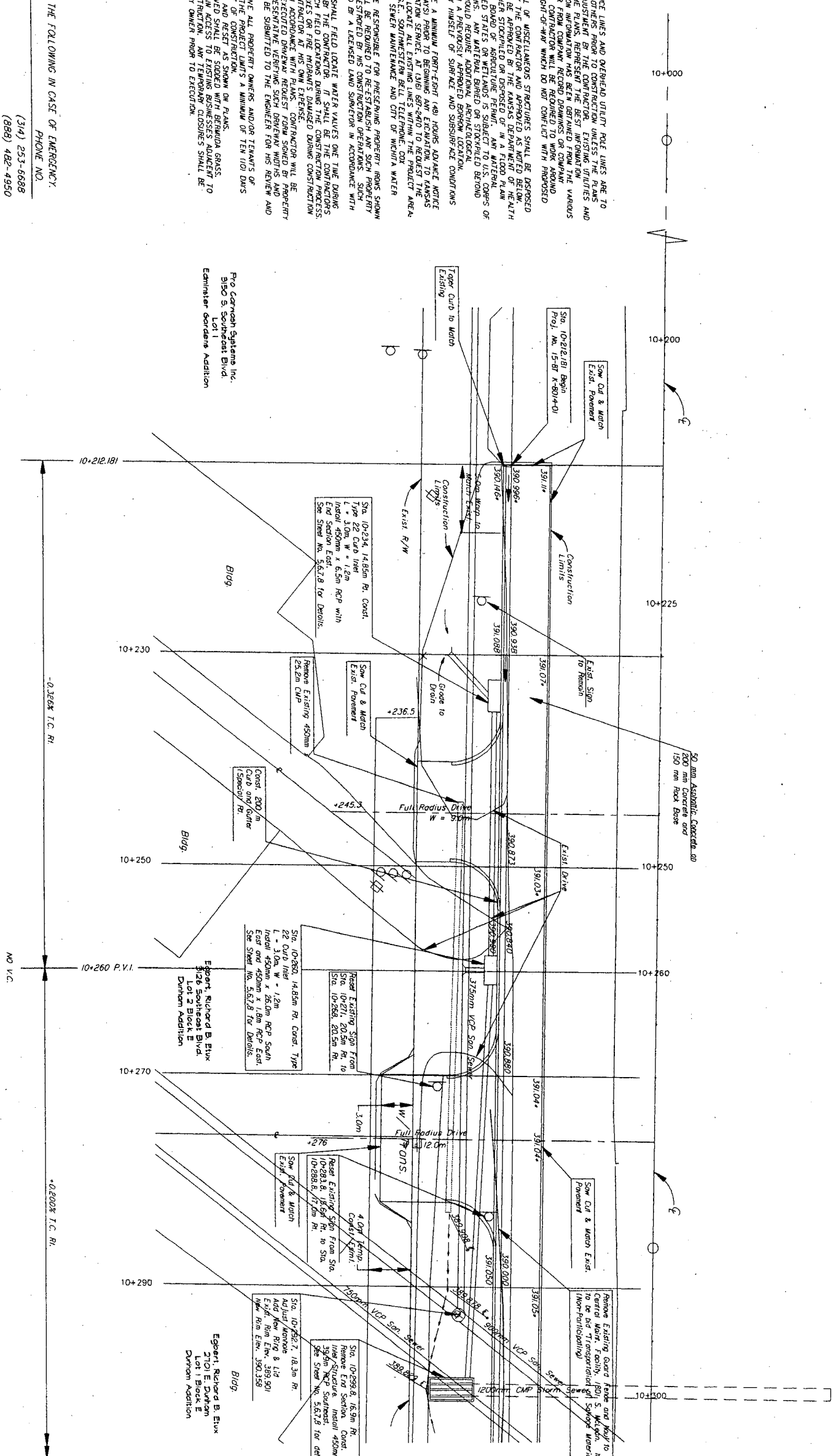
BM #16. " - Cul S.E. Cor. Conc. Pipe Bore 3.1/8"m R
Sta. 10+129.074 Elev. = 391.187

FLYNN REC NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEET
7	KANSAS	15-87 K-8014-01	2002	3	2

CITY OF WICHITA
PLAN STA. 10+212.181 TO STA. 10+305.000
WICHITA, KANSAS

[illegible]

2150 S. Southeast Blvd.
Lot 1
Edminster Gardens Addition



CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY

Digital Teleport	(314) 253-6666
KG5 Goss	(888) 482-4141
Weston Electric Co.	(316) 383-8686
Cox Communications	(316) 266-4242
3WB Telephone	(800) 870-8708
City of Wichita Water & Sewer Dept.	(316) 268-4949
City of Wichita Stormwater Utility	(316) 268-4040

PROJECT NO. 01W00
REVISED: DATE: 4/4/00
DRIVEWAY 10-276

Schwab-Eaton, P.A.
CIVIL ENGINEERS • LAND SURVEYORS
AND LANDSCAPE ARCHITECTS

8615 West Frazier, Suite 2, Wichita, Kansas 67212

CHECKED BY:	CM
DRAWN BY:	MCO
DATE:	MARCH 2004
SHEET NUMBER:	3
TOTAL SHEETS:	21

P.O.I. Sta. 10+606.057
3.44m E
6.53m N
14.20m S.W.

1. Flush with Ground
2. Spk. 1 Washer
3. Spk. 2 Washer
4. Spk. 1 Washer

SCALE 1:200

RD #16A Spk. 1 Spk. 2 Spk. 3 P.P. 45.46m N
Sta. 10+376.256 Elev. = 380.799

* Motor Existing

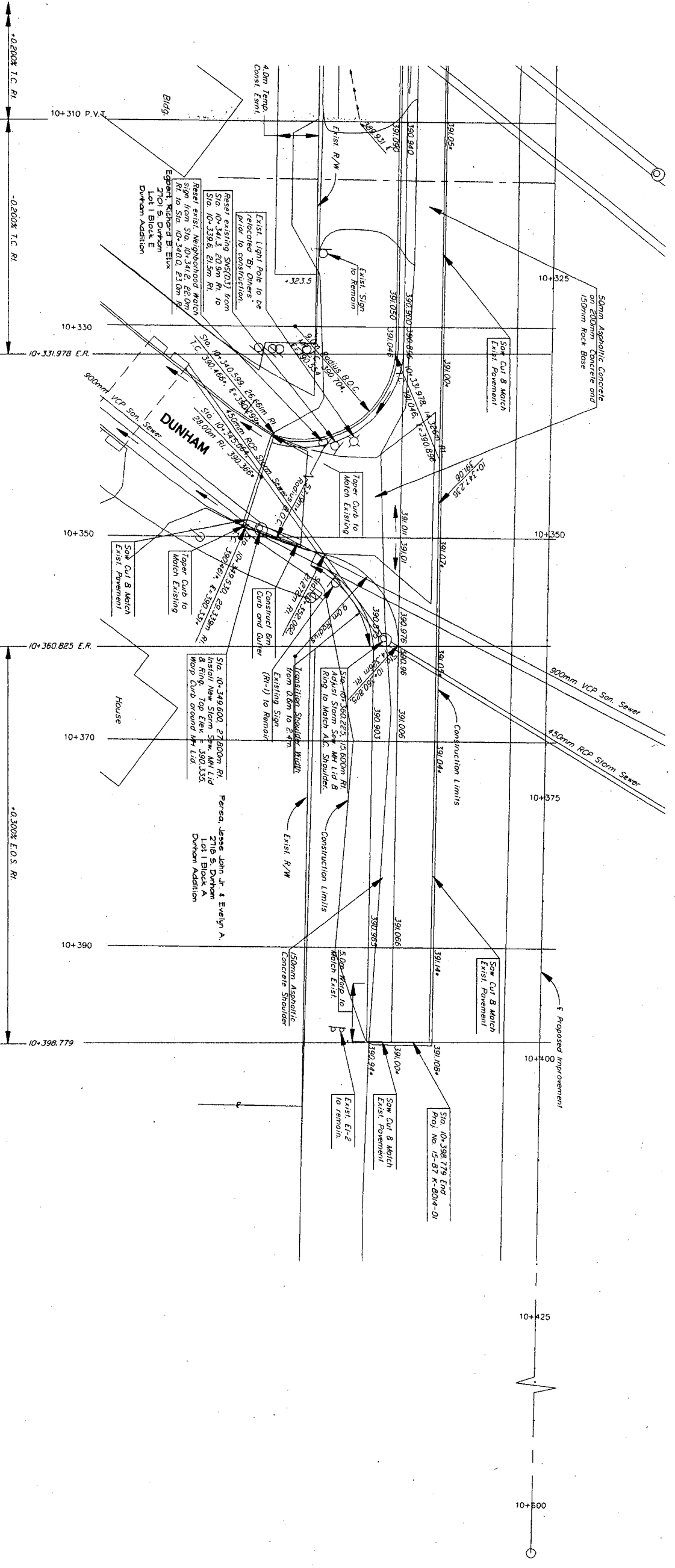
NO.	DATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	10/20/02	15-07-001-01	2002	4	21

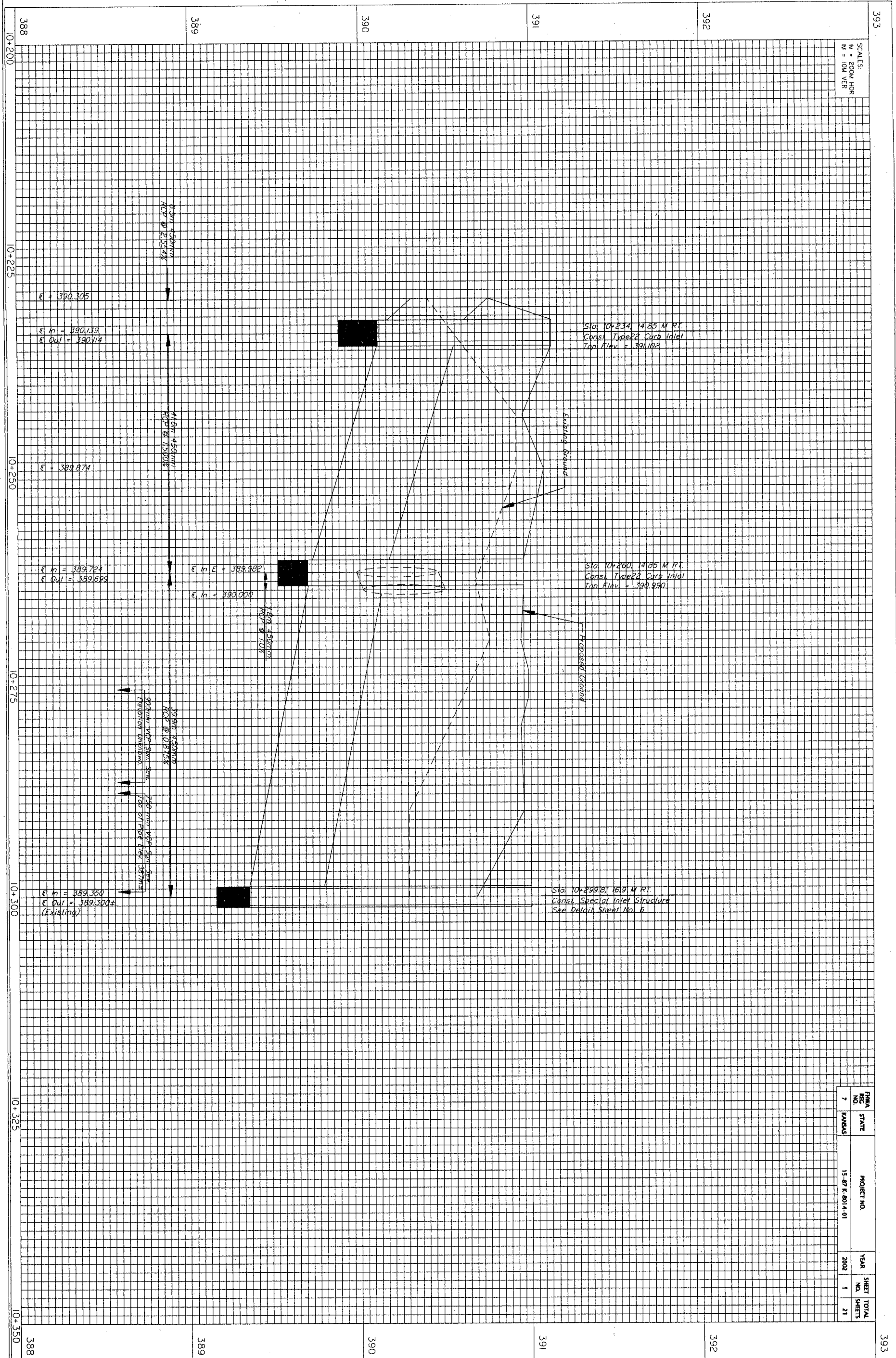
CITY OF WICHITA
PLAN STA. 10+305.00 TO STA. 10+389.779
WICHITA, KANSAS



PROJECT NO. DW002
REVISION: DATE:

CHECKED BY:	CM
DRAWN BY:	DAC
DATE:	SEPTEMBER 2002
SHEET NUMBER:	4
TOTAL SHEETS:	21





FINMA REC NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	15-87 K-8014-01	2002	5	21

CITY OF WICHITA
KANSAS STATE HIGHWAY 15
WICHITA, KANSAS

Schwab-Eaton, P.A.
CIVIL ENGINEERS • LAND SURVEYORS
AND LANDSCAPE ARCHITECTS
8615 West Frazier, Suite 2, Wichita, Kansas 67212

8615 West Frazier, Suite 2, Wichita, Kansas 67212

PROJECT NO. 01W00
REVISED: DATE:
DRIVEWAY 4/4/0
10+276

CHECKED BY:	CM
DRAWN BY:	MCO

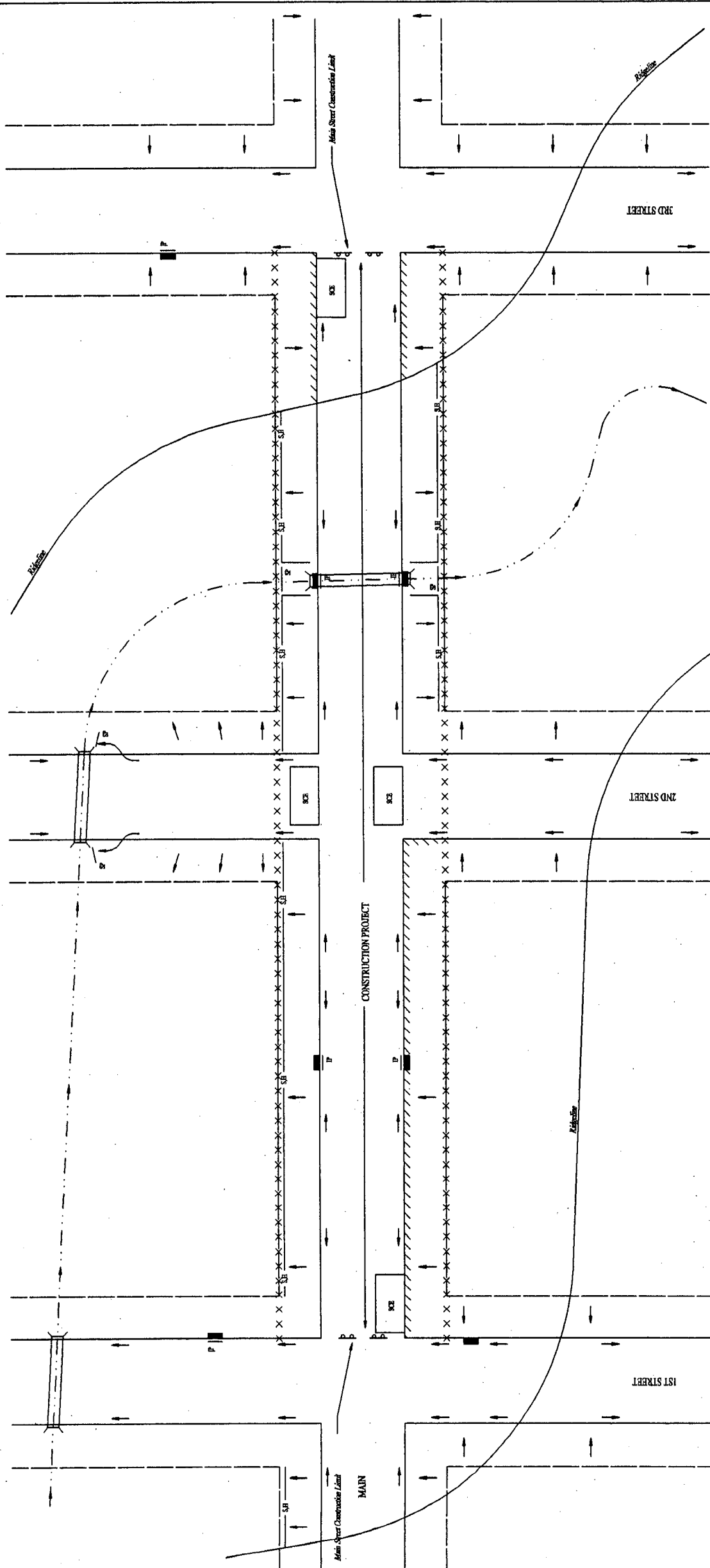
MARCH 2004	SHEET NUMBER:	5	TOTAL SHEETS:	21
------------	------------------	---	------------------	----

FWHA REG NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	15-87 K-8014-01	2002	9	21

GENERAL NOTES:

1. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPES OF BMP'S WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
2. BMP'S MUST BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION PROCESS.
3. IF THE PROJECT WILL DISTURB 5 ACRES OR MORE, A FEDERAL/STATE NONS POINTABLE PERMIT IS REQUIRED. A DETAILED STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. THE BMP'S SHOWN ON THIS SHEET ARE CONSIDERED TO BE THE MINIMUM TO BE SEEN IN THE POLLUTION PREVENTION PLAN.

- FAILURE TO USE AND MAINTAIN BMPs IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
- THE APPLICATION OF BMPs GROWN ON THIS SITES IS FOR SITUATIONS WHERE THERE IS A CONCERN FOR EROSION. BMPs ARE NOT REQUIRED FOR AREAS THAT MAY REQUIRE A DIFFERENT TYPE OF OTHER THAN THOSE SHOWN. BMPs, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.



BACK OF CURB PROTECTION DETAIL.

2017

- EXCLOSOR BLANKET MAY BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
- EXCLOSOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- AFTER INSTALLATION OF EXCLOSOR BLANKET, AT LOCATIONS WHERE CONCENTRATED FLOW CARRIES SEDIMENT OVER THE CURB AND INTO THE GUTTER, SUPPLEMENTAL BMP'S WILL BE INSTALLED BY THE CONTRACTOR AS NEEDED, TO FIX THE PROBLEM.

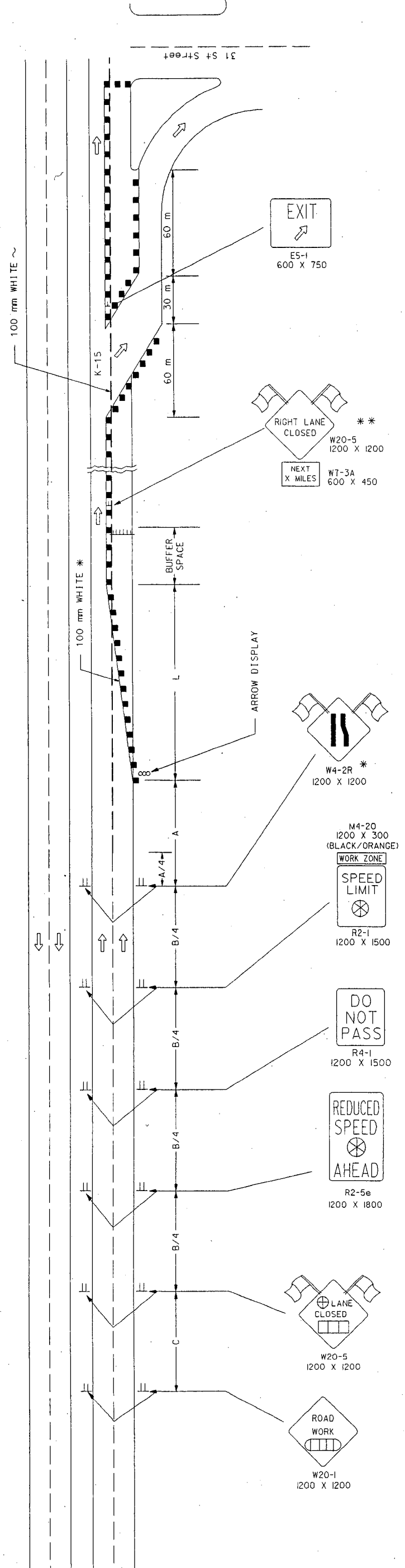
**EROSION BMPS
STREET
IMPROVEMENT
PROJECTS**

PROJECT NUMBER	CCA NO.
CHRISTOPHER M. CARRIER, P.E. STORM WATER ENGINEER	

DATE: 10/21/2002 SHEET: 9 OF 21

AREA	STATE	PROJECT NO.	YEAR	SHEET TOTAL
7	KANSAS	15-87 K-8014-01	2002	10 21

REFER TO STD. TET001 FOR ADDITIONAL INFORMATION ON TRAFFIC CONTROL SIGNS AND SIGN SPACING.
REFER TO STD. TET025 FOR INFORMATION ON TAFFERS AND CHANNELIZING DEVICES.
REFER TO STD. TET003 FOR LENGTH OF BUFFER SPACE.



A TRAILER OR TRUCK WITH AN ARROW DISPLAY MAY BE USED TO PLACE THE ARROW DISPLAY. THE ARROW DISPLAY SHOULD BE LOCATED BETWEEN THE BUFFER SPACE AND THE WORK AREA.

LEFT-SIDE SIGNS SHALL BE OMITTED FOR A FOUR-LANE UNDIVIDED HIGHWAY.

- * FOR LEFT LANE CLOSURES USE W4-2L AND YELLOW EDGE LINE ALONG CHANNELIZING DEVICES.
- ** THE W20-5 (RIGHT LANE CLOSED) AND W7-3A (NEXT X MILES) SIGNS SHOULD BE PLACED AT 3.2 KILOMETER INCREMENTS ON A PROJECT OF 6.4 KILOMETERS OR LONGER.

100 mm WHITE BROKEN LINE TO BE PAINTED ON AFTER CONSTRUCTION AS TEMPORARY PAVEMENT MARKING. PERMANENT MARKING WILL BE DONE BY OTHERS WITH THE MILL AND OVERLAY PROJECT FOR THIS STRETCH OF HIGHWAY. ITEM TO BE BID 'LUMP SUM STRIPING'.

- Channelizing Devices
- All Type III Barricades
- W20-5: 500 FT OR 1 MILE
- Speed To Be Determined By The Engineer
- W20-5: 1000 FT, 1500 FT OR 1/2 MILE
- Right Or Left
- X Length To The Nearest Whole Mile

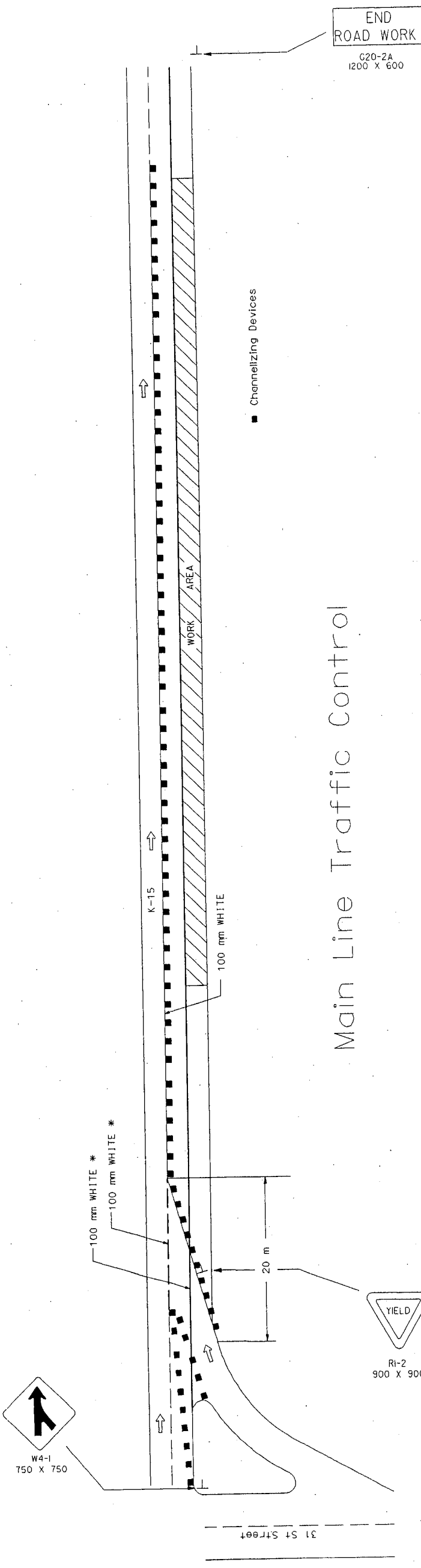
NO.	DATE	REVISION	BY	APP'D.
1	9-28-02	REVISED CDD-1 SIGNS, ADDED W20-5 AND W7-3A		
2				

KANSAS DEPARTMENT OF TRANSPORTATION
TYPICAL TRAFFIC CONTROL
FOUR-LANE HIGHWAY
ONE LANE CLOSED

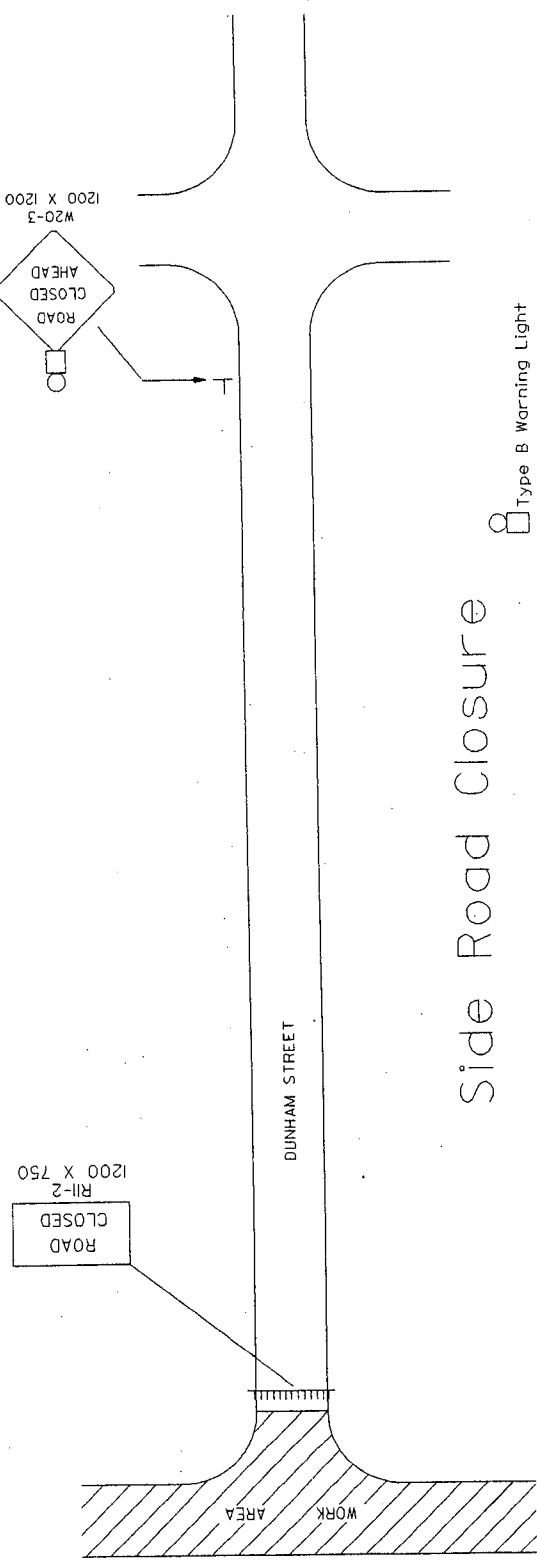
DESIGNED BY	9-28-02	DATE	9/1/00	DATE
DRAWN BY	9-28-02	DATE	9/1/00	DATE
CHECKED BY	9-28-02	DATE	9/1/00	DATE
IN CHARGE	9-28-02	DATE	9/1/00	DATE

FWA NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
1	KANSAS	15-87 K-8014-01	2002	100	21

REFER TO STD. TET051 FOR ADDITIONAL INFORMATION ON TRAFFIC CONTROL SIGNS AND SIGN SPACING.
REFER TO STD. TET025 FOR INFORMATION ON TAPERS AND CHANNELIZING DEVICES.



ADVANCED SIGNS INCLUDING THE CLOSURE OF THE ROAD SHOULD BE PLACED IN PLACE THROUGHOUT CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN ACCESS TO ALL PROPERTIES ADJACENT TO K-15 AT ALL TIMES.



Type B Warning Light
Channelizing Devices

- 100 mm WHITE BROKEN LINE TO BE PAINTED AFTER CONSTRUCTION AS TEMPORARY PAVEMENT MARKING. PERMANENT MARKING WILL BE DONE BY OTHERS WITH THE MILL AND OVERLAY PROCESS. THE SPACING OF HORIZONTAL ITEM TO BE 60 LUMP SUM STRIPING.

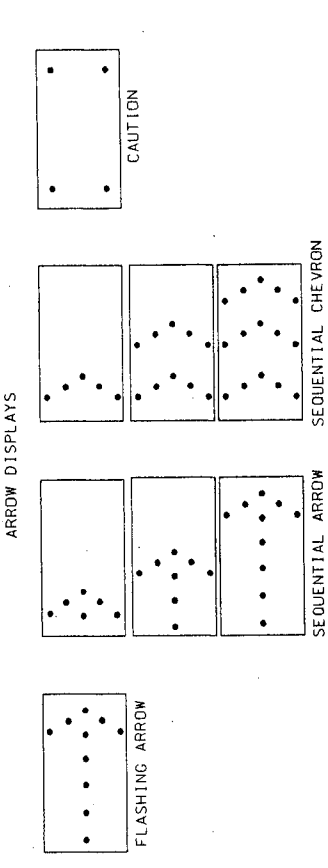
KANSAS DEPARTMENT OF TRANSPORTATION				
TRAFFIC CONTROL				
NO.	DATE	REVISION	BY	APPD.
1				
2				

FWA NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
1	KANSAS	15-87 K-8014-01	2002	100	21

10. NCHRP REPORT 350 CRASHWORTHY REQUIREMENTS:
TRAFFIC CONTROL DEVICES SHALL MEET THE EVALUATION CRITERIA IN NCHRP REPORT 350 AS
SUPPLEMENTED BY FHWA MEMORANDUM "IDENTIFYING ACCEPTABLE HIGHWAY SAFETY FEATURES, DATED
JULY 25, 1997 (AVAILABLE ON THE INTERNET AT
HTTP://606837.fhwa.dot.gov/eqw/traffic/IDCo_FHS_Food_Pol_Item).

THE CONTRACTOR SHALL:
1) CERTIFY THAT ALL CATEGORY 1 DEVICES (AS DEFINED IN THE FHWA MEMORANDUM) WERE PURCHASED
PRIOR TO OCTOBER 1, 1998; OR IF THE DEVICES WERE PURCHASED AFTER OCTOBER 1, 1998, INCLUDE A
COPY OF THE MANUFACTURER'S SELF-CERTIFICATION THAT THEY ARE NCHRP REPORT 350 COMPLIANT.
2) CERTIFY THAT ALL CATEGORY 2 DEVICES (AS DEFINED IN THE FHWA MEMORANDUM) WERE PURCHASED
PRIOR TO OCTOBER 1, 2000; OR IF THE DEVICES WERE PURCHASED AFTER OCTOBER 1, 2000, INCLUDE
A COPY OF THE ENTIRE FHWA ACCEPTANCE LETTER FOR EACH OF THE DEVICES THAT ARE
NCHRP REPORT 350 COMPLIANT.
3) CERTIFY THAT THE TRUCK MOUNTED ATTENUATORS (TMA'S) WHICH ARE DEFINED AS CATEGORY 3
DEVICES BY THE FHWA MEMORANDUM WERE PURCHASED PRIOR TO OCTOBER 1, 1998, AND INCLUDE A COPY
OF THE ENTIRE FHWA ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 230 COMPLIANT;
OR IF THE DEVICES WERE PURCHASED AFTER OCTOBER 1, 1998, INCLUDE A COPY OF THE ENTIRE FHWA'S
ACCEPTANCE LETTER STATING THAT THE TMA'S ARE NCHRP REPORT 350 COMPLIANT.

ALL CATEGORY 1 & 2 DEVICES PURCHASED PRIOR TO THE ABOVE DATES MAY BE USED UNTIL THE END OF THEIR
SERVICEABLE LIVES OR JANUARY 1, 2002, WHICHEVER COMES FIRST. TMA'S PURCHASED PRIOR TO OCTOBER 1,
1998, MAY BE USED UNTIL THE END OF THEIR SERVICEABLE LIVES.



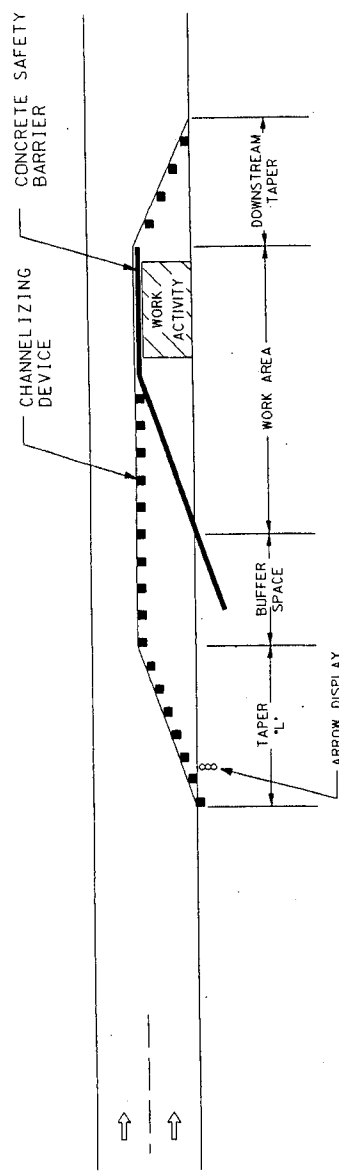
ARROW DISPLAY ELEMENTS SHALL BE CAPABLE OF A MINIMUM 50 PERCENT
DIMMING FOR NIGHT USE. WHEN USED FOR DAY AND DIMMED WIDE SHALL BE USED FOR NIGHT.
AN ARROW DISPLAY IN THE CAUTION MODE SHALL BE USED ONLY FOR
SHOULDER WORK OR ROADSIDE WORK NEAR THE SHOULDER.

SPEED (MPH) *	20	25	30	35	40	45	50	55	60	65	70
LENGTH (m)	10	15	25	35	50	65	85	100	125	150	175

NEITHER WORK ACTIVITY NOR STORAGE OF EQUIPMENT, VEHICLES, OR MATERIAL
SHOULD OCCUR IN THE BUFFER SPACE. WHEN A PROTECTION VEHICLE IS PLACED
IN ADVANCE OF THE WORK AREA, ONLY THE SPACE UPSTREAM OF THE VEHICLE
CONSTITUTES THE BUFFER SPACE.

* POSTED SPEED PRIOR TO WORK STARTING

IF TEMPORARY CONCRETE SAFETY BARRIER IS USED TO SEPARATE APPROACHING
TRAFFIC FROM THE WORK ACTIVITY, THE BARRIER SHALL BE CONSIDERED PART
OF THE WORK AREA. A FULL LANE WIDTH SHOULD BE AVAILABLE THROUGHOUT
THE LENGTH OF THE BUFFER SPACE. FOR EXAMPLE:



1. MUTCD COMPLIANCE
ALL TRAFFIC CONTROL DEVICES AND THEIR INSTALLATION AND MAINTENANCE
SHALL COMPLY WITH THE REQUIREMENTS OF THE MANUAL ON UNIFORM
TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS.
WHENEVER THE TRAFFIC CONTROL STANDARDS CONFLICT WITH THE MANUAL,
THE STANDARDS SHALL GOVERN.

2. DESIGN SPEED
TRAFFIC CONTROL SHOULD BE DESIGNED AND INSTALLED USING THE POSTED
SPEED OF THE ROADWAY PRIOR TO WORK STARTING.

3. CLEAR ZONE
WHENEVER PRACTICAL, ALL CONSTRUCTION EQUIPMENT (INCLUDING VEHICLES),
MATERIALS, AND DEBRIS SHALL BE STORED OUT OF THE CLEAR ZONE. WHERE
THIS CANNOT BE ACHIEVED, THE CONTRACTOR SHALL PLACE APPROPRIATE SIGNS,
OBJECT IDENTIFIERS, AND/OR BARRICADES AS DESIGNATED BY THE ENGINEER.
TRAFFIC CONTROL DEVICES NEEDED FOR THIS CONDITION SHALL BE CONSIDERED
SUBSIDIARY TO OTHER BID ITEMS.

4. MINIMUM LANE WIDTHS
LANE WIDTHS SHALL BE A MINIMUM OF 3.4 m (MEASURED BETWEEN CENTERLINES
OF PAVEMENT MARKINGS) OR AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE
ENGINEER. A LANE WIDTH LESS THAN 3.4 m MAY REQUIRE RESTRICTED ROADWAY
WIDTH SIGNING.

5. FLAGGER
A MINIMUM OF ONE FLAGGER SHALL BE STATIONED WITHIN EACH MULTI-LANE
ROADWAY WORK AREA WHERE WORK IS IN A CLOSED LANE ADJACENT TO TRAFFIC
AND NOT SEPARATED BY CONCRETE SAFETY BARRIER.

6. PAVEMENT MARKING
(A) TYPE I TAPE IS TO BE APPLIED TO A FINAL SURFACE (NEW PAVEMENT OR ANY
SURFACE THAT WILL REMAIN WHEN THE PROJECT IS COMPLETE) AS A TEMPORARY
MARKING WHEN THE TEMPORARY MARKINGS WILL BE REMOVED. WHEN TYPE I
TAPE IS SPECIFIED, ONLY TYPE I TAPE WILL BE ALLOWED.

TYPE II TAPE IS TO BE APPLIED TO A SURFACE THAT IS TO BE REMOVED OR
COVERED BY FUTURE CONSTRUCTION.

TYPE III TAPE (REMOVAL REQUIRED) IS TO BE APPLIED TO A SURFACE THAT IS
TO BE REMOVED OR COVERED BY FUTURE CONSTRUCTION, BUT ON WHICH THE
MARKINGS MUST BE REMOVED TO ALLOW FOR A DIFFERENT TRAFFIC CONTROL PATTERN
PRIOR TO THE REMOVAL OR COVERING OF THE SURFACE.

TYPE IIIA TAPE MAY BE APPLIED AS TEMPORARY BROKEN LINES ON INTERMEDIATE
BITUMINOUS SURFACES ONLY.
WHEN TYPE II, TYPE II (REMOVAL REQUIRED), OR TYPE IIIA TAPE IS SPECIFIED,
THE CONTRACTOR HAS THE OPTION TO USE EITHER TYPE I OR TYPE II TAPE.

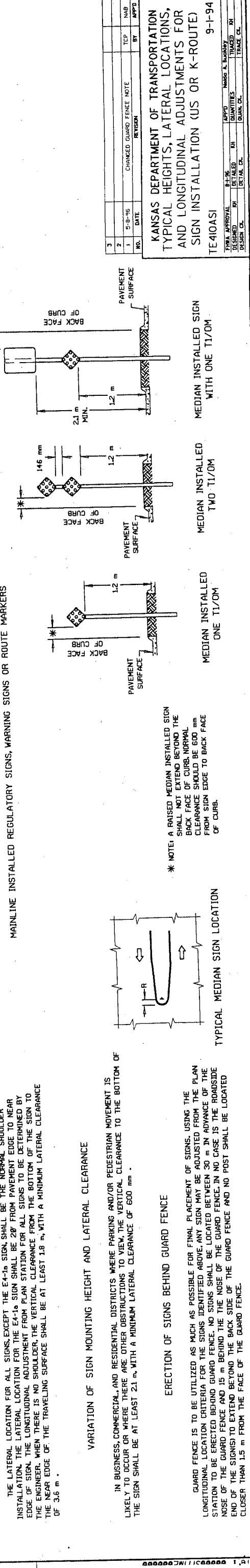
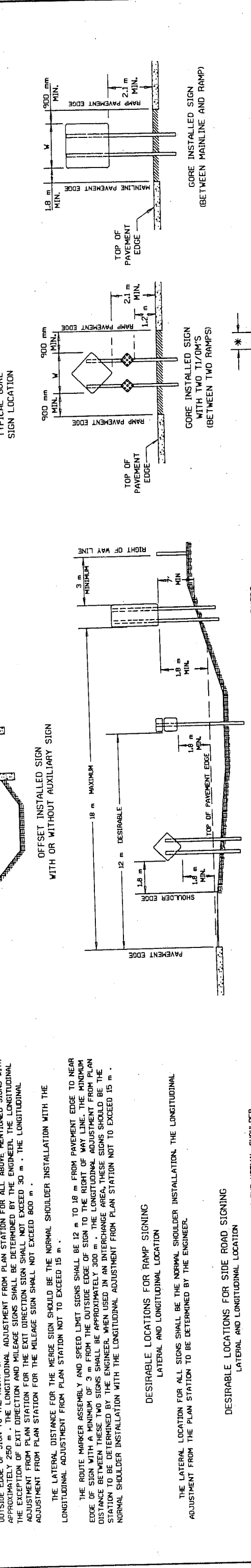
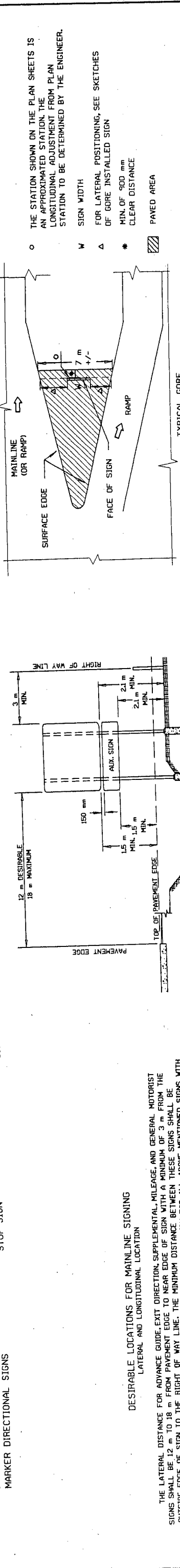
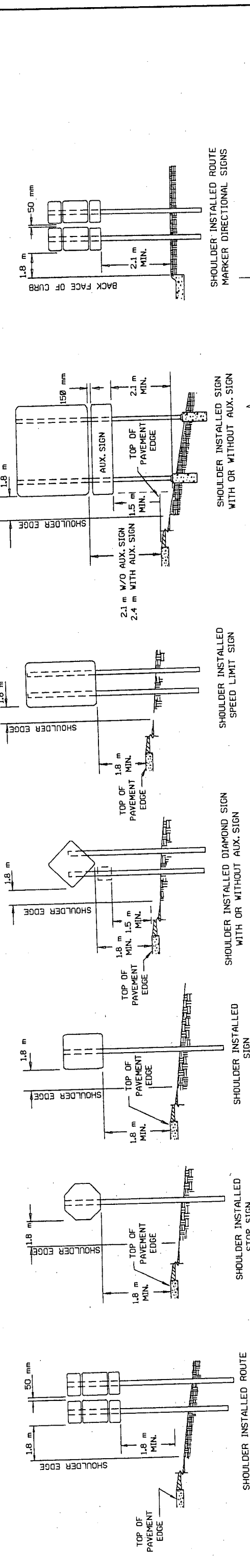
IF RECOMMENDED BY THE MANUFACTURER, USE A PRIMER TO PRECONDITION THE
PAVEMENT SURFACE.
(B) ALL CONFLICTING PAVEMENT MARKINGS SHALL BE REMOVED AND ALL TRANSITION
TAPERS, CROSSED, AND EDGE LINES ALONG CHANNELIZING DEVICES SHALL BE
MARKED WITH SOLID 100mm WIDE PAVEMENT MARKING WHEN THE WORK WILL
OCCUPY A LOCATION MORE THAN THREE DAYS.

WHEN LINE MASKING TAPE IS SPECIFIED TO TEMPORARILY COVER EXISTING
PAVEMENT MARKINGS, ONLY LINE MASKING TAPE SHALL BE USED. WHEN EXISTING
PAVEMENT MARKING REMOVAL IS SPECIFIED, THE CONTRACTOR HAS THE OPTION
TO EITHER REMOVE THE EXISTING PAVEMENT MARKING OR APPLY LINE
MASKING TAPE.

7. FIRST MODULE OF IBS:
THE FIRST MODULE OF EACH INERTIAL BARRIER SYSTEM (IBS) SHALL HAVE A
MINIMUM OF 0.175 SO m OF FLUORESCENT ORANGE PRISMATIC GRADE
RETROREFLECTIVE SHEETING FACING TRAFFIC. EITHER A VERTICAL RECTANGLE
OR DIAMOND SHAPE MAY BE USED.

8. TRUCK-MOUNTED ATTENUATOR (TMA):
THE CONTRACTOR HAS THE OPTION TO USE A TMA ON A PROTECTION VEHICLE OR AS
SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE HASH MARKINGS ON
THE BACK OF THE TMA SHALL BE BLACK AND YELLOW STRIPES.

9. PEDESTRIAN AND WORKER SAFETY:
EVERY EFFORT SHOULD BE MADE TO SEPARATE PEDESTRIANS AND WORKERS FROM
ADJACENT TRAFFIC. PEDESTRIANS SHOULD NOT BE LED INTO DIRECT CONTACT
WITH WORK SITE VEHICLES, EQUIPMENT, OR MATERIALS. PEDESTRIANS SHOULD
BE PROVIDED WITH A SAFE, CONVENIENT TRAVEL PATH. WORKERS SHOULD BE TRAINED IN HOW TO WORK NEXT
TO TRAFFIC IN A WAY THAT MINIMIZES THEIR VULNERABILITY.



- THE STATION SIGN ON THE PLAN SHEETS IS AN APPROXIMATE STATION. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION TO BE DETERMINED BY THE ENGINEER.
- △ FOR LATERAL POSITIONING, SEE SKETCHES
- ◇ CORE INSTALLED SIGN
- MIN. OF 900 mm CLEAR DISTANCE
- PAVED AREA

DESIRABLE LOCATIONS FOR MAINLINE SIGNING LATERAL AND LONGITUDINAL LOCATION

THE LATERAL DISTANCE FOR ADVANCE GUIDE, EXIT DIRECTION, SUPPLEMENTAL MILEAGE, AND GENERAL MOTORIST SIGNS SHALL BE 12 m TO 18 m FROM PAVEMENT EDGE TO NEAR EDGE OF SIGN. WHEN ADVANCE GUIDE SIGNS ARE LOCATED OUTSIDE EDGE OF SIGN TO THE RIGHT OF WAY, THE MINIMUM LATERAL DISTANCE FROM PAVEMENT EDGE TO NEAR EDGE OF SIGN SHALL BE 12 m. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION FOR ALL ABOVE MENTIONED SIGNS WITH APPROXIMATE 200 m. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION FOR THE EXIT DIRECTION SIGN SHALL NOT EXCEED 50 m. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION FOR THE MILEAGE SIGN SHALL NOT EXCEED 800 m.

THE LATERAL DISTANCE FOR THE MERGE SIGN SHOULD BE THE NORMAL SHOULDER INSTALLATION WITH THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION NOT TO EXCEED 15 m.

THE ROUTE MARKER ASSEMBLY AND SPEED LIMIT SIGNS SHALL BE 12 m TO 18 m FROM PAVEMENT EDGE TO NEAR EDGE OF SIGN WITH A MINIMUM OF 3 m FROM THE PAVEMENT EDGE TO THE RIGHT OF WAY LINE. THE MINIMUM DISTANCE BETWEEN ADVANCE GUIDE SIGNS SHALL BE APPROXIMATELY 500 m. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION FOR THE ADVANCE GUIDE SIGNS SHALL BE DETERMINED BY THE ENGINEER. WHEN USED IN AN INTERCHANGE AREA, THESE SIGNS SHOULD BE THE NORMAL SHOULDER INSTALLATION WITH THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION NOT TO EXCEED 15 m.

DESIRABLE LOCATIONS FOR SIDE ROAD SIGNING LATERAL AND LONGITUDINAL LOCATION

THE LATERAL LOCATION FOR ALL SIGNS SHALL BE THE NORMAL SHOULDER INSTALLATION. THE LONGITUDINAL ADJUSTMENT FROM THE PLAN STATION TO BE DETERMINED BY THE ENGINEER.

DESIRABLE LOCATIONS FOR RAMP SIGNING LATERAL AND LONGITUDINAL LOCATION

THE LATERAL LOCATION FOR ALL SIGNS EXCEPT THE 65-40 SIGN SHALL BE THE NORMAL SHOULDER INSTALLATION. THE LATERAL LOCATION FOR THE 65-40 SIGN SHALL BE 20 m FROM PAVEMENT EDGE TO NEAR EDGE OF SIGN. THE LONGITUDINAL ADJUSTMENT FROM PLAN STATION FOR ALL SIGNS TO BE DETERMINED BY THE ENGINEER. WHEN THERE IS NO SHOULDER, THE VERTICAL CLEARANCE FROM THE SIGN TO THE NEAR EDGE OF THE TRAVELING SURFACE SHALL BE AT LEAST 1.5 m WITH A MINIMUM LATERAL CLEARANCE OF 3.0 m.

VARIATION OF SIGN MOUNTING HEIGHT AND LATERAL CLEARANCE

IN BUSINESS, COMMERCIAL AND RESIDENTIAL DISTRICTS WHERE PARKING AND/OR PEDESTRIAN MOVEMENT IS LIKELY TO OCCUR OR WHERE THERE ARE OTHER OBSTRUCTIONS TO PARKING, THE MINIMUM LATERAL CLEARANCE TO THE BOTTOM OF THE SIGN SHALL BE AT LEAST 21 m WITH A MINIMUM LATERAL CLEARANCE OF 600 mm.

ERECTOR OF SIGNS BEHIND GUARD FENCE

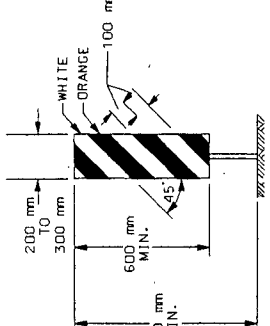
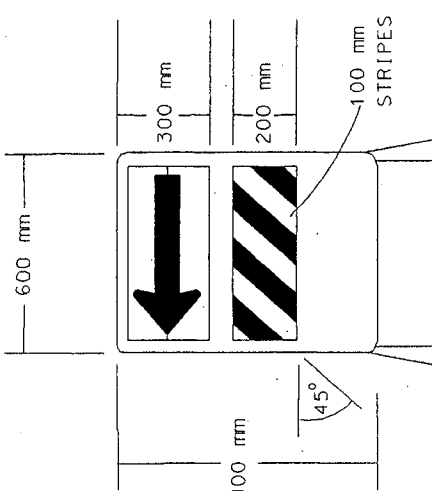
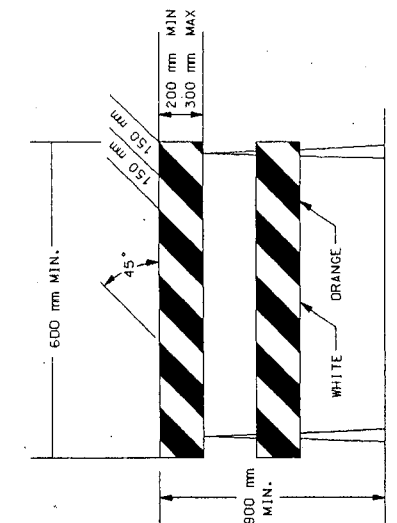
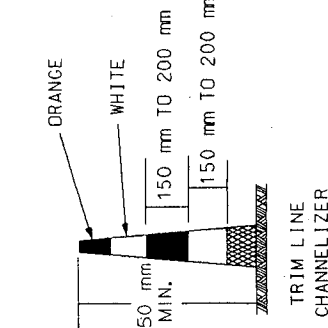
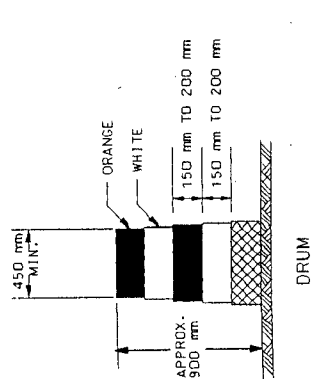
GUARD FENCE IS TO BE UTILIZED AS MUCH AS POSSIBLE FOR FINAL PLACEMENT OF SIGNS. USING THE LONGITUDINAL LOCATION CRITERIA FOR THE SIGNS IDENTIFIED ABOVE, LOCATED BETWEEN 30 m IN ADVANCE OF THE STATION TO BE ERECTED BEHIND GUARD FENCE. THE SIGN SHALL BE LOCATED BETWEEN 30 m IN ADVANCE OF THE END OF THE SIGN TO EXTEND BEYOND THE BACK SIDE OF THE GUARD FENCE AND NO POST SHALL BE LOCATED CLOSER THAN 1.5 m FROM THE FACE OF THE GUARD FENCE.

NO.	DATE	REVISION	BY	CHKD.
1	5-8-95	CHANGED GUARD FENCE NOTE	TOP	MS
2				

KANSAS DEPARTMENT OF TRANSPORTATION
TYPICAL HEIGHTS, LATERAL LOCATIONS,
AND LONGITUDINAL ADJUSTMENTS FOR
SIGN INSTALLATION (US OR K-ROUTE)
TE4040SI 9-1-94

TOTAL SHEETS	14
TOTAL SHEETS USED	14
TOTAL SHEETS LEFT	0
TOTAL SHEETS RIGHT	0
TOTAL SHEETS TOTAL	14

FORM NO.	STATE	PROJECT NO.	YEAR	SHEET TOTAL NO. SHEETS
7	KANSAS	15-87 K-4014-01	2002	12 21



THE ENTIRE AREA OF VERTICAL PANELS, BOTH FRONT AND BACK, SHALL BE FULLY RETROREFLECTIVE SHEETING. VERTICAL PANELS USED ON ROADWAYS WITH A SPEED LIMIT OF 45 MPH OR GREATER SHALL HAVE A MINIMUM OF 0.175 SQ. M OF RETROREFLECTIVE AREA FACING TRAFFIC. THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.

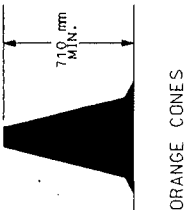
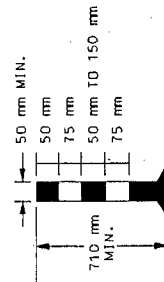
THE ARROW PANEL SHALL BE BLACK ON FLUORESCENT ORANGE PRISMATIC GRADE SHEETING. THE STRIPES SHALL BE ORANGE AND WHITE TYPE III HIGH PERFORMANCE RETROREFLECTIVE SHEETING SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS.

THE DIRECTION INDICATOR BARRICADE SHOULD BE USED IN SERIES TO DIRECT THE MOTORIST INTO THE INTENDED LINE OF TRAVEL. THE ARROW PANEL SHOULD NOT BE VISIBLE TO OPPOSING TRAFFIC.

FOR WOODEN BARRICADES, NOMINAL LUMBER DIMENSIONS WILL BE SATISFACTORY. FOR RAILS LESS THAN 900 mm LONG, 100 mm WIDE STRIPES MAY BE USED.

THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL BE FULLY RETROREFLECTIVE SHEETING. THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL BE FULLY RETROREFLECTIVE SHEETING. THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL BE FULLY RETROREFLECTIVE SHEETING.

BARRICADES USED ON ROADWAYS WITH SPEED LIMITS OF 45 MPH OR MORE SHALL HAVE A MINIMUM OF 0.175 SQ. M OF RETROREFLECTIVE AREA FACING TRAFFIC. THE STRIPES SHALL SLOPE DOWNWARD TO THE TRAFFIC SIDE FOR CHANNELIZATION.



CONES MAY BE USED AS CHANNELIZING DEVICES FOR DAYTIME OPERATIONS ONLY. THEY WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE SUBSIDIARY, TO OTHER TRAFFIC CONTROL BID ITEMS. THE ENGINEER MAY REQUIRE THAT CONES BE SUPPLEMENTED BY OTHER TRAFFIC CONTROL DEVICES IN CERTAIN SITUATIONS SUCH AS OPEN TRENCHES.

LOCATION	CROSS-OVER	DIVERSIONS	TANGENTS	RAMPS	HEAD TO HEAD	OBJECT IDENTIFIER
ITEM	YES	YES	YES	YES	YES	YES
TRIM LINES	(2)	(2)	(2)	(1-2)	YES	YES
PORTABLE VERTICAL PANELS	(3)	(3)	(3)	(1-3)	YES	YES
DIRECTION INDICATOR BARRICADE	NO	NO	YES	NO	NO	YES
TYPE I BARRICADE	(3)	(3)	(3)	NO	NO	YES
PORTABLE TUBULAR MARKERS	NO	NO	YES	NO	YES	(1)
FIXED TUBULAR MARKERS	(4)	(4)	(4)	(4)	YES	NO
FIXED VERTICAL PANELS	(4)	(4)	(4)	(4)	(4)	YES

- Not allowed on freeways or expressways, or for durations of more than three days.
- Place at normal spacing if sheeted with fluorescent orange prismatic sheeting. Place at 1/2 spacing in tapers but pay at the rate of one device per full space if orange stripes are Type III high performance sheeting. Inter-mixing of trim line channelizers with fluorescent orange and orange Type III high performance sheeting is not allowed.
- Stripes must slope down toward direction traffic is to pass.
- Fixed tubular markers or Vertical Panels may be substituted for any of the above situations with the approval of the Engineer.

TAPER FORMULAS:

L = WS FOR SPEEDS OF 45 MPH OR MORE

L = WS²/60 FOR SPEEDS OF 40 MPH OR LESS

WHERE: L = MINIMUM LENGTH OF TAPER IN METERS
S = NUMERICAL VALUE OF POSTED SPEED
PRIOR TO WORK STARTING IN MPH
W = WIDTH OF OFF-SET IN METERS

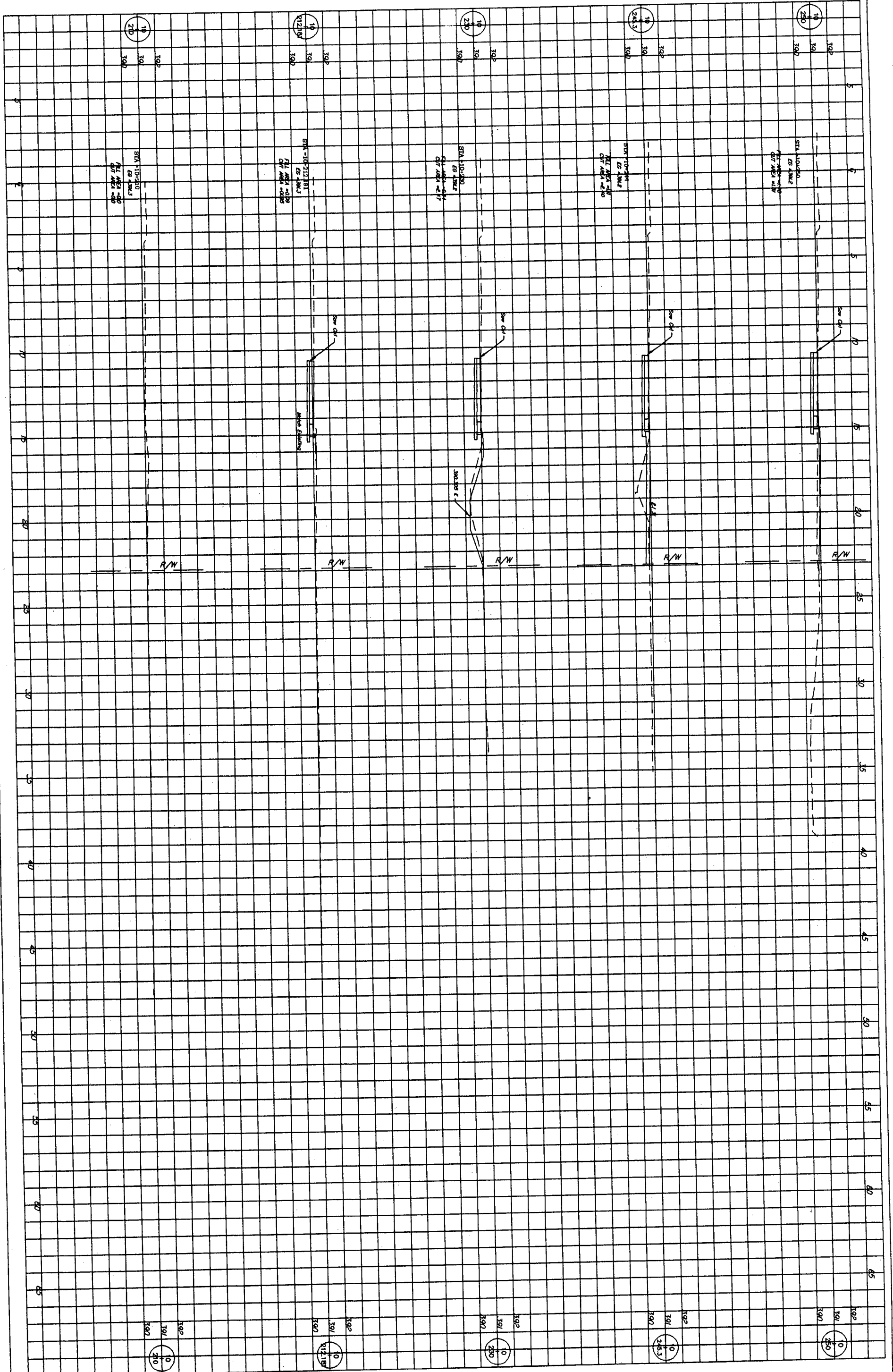
CHANNELIZER PLACEMENT:

- THE SPACING BETWEEN DEVICES IN THE TAPER SHOULD NOT EXCEED A DISTANCE IN METERS EQUAL TO 0.3 TIMES THE POSTED SPEED LIMIT IN MPH PRIOR TO WORK STARTING.
- THE SPACING BETWEEN DEVICES IN THE WORK ZONE SHOULD NOT EXCEED A DISTANCE IN METERS OF 0.6 TIMES THE POSTED SPEED LIMIT IN MPH PRIOR TO WORK STARTING.
- WHERE EXISTING CONDITIONS WARRANT, THE ENGINEER MAY REQUIRE A DECREASE IN THE SPACING STIPULATED ABOVE, WHEN TRAFFIC CONTROL IS BID LUMP SUM, ADDITIONAL DEVICES WILL BE PAID FOR AS EXTRA WORK.
- CHANNELIZING DEVICES SHALL BE PLACED FOR OPTIMUM VISIBILITY, NORMALLY AT RIGHT ANGLES TO THE TRAFFIC FLOW.
- CHANNELIZING DEVICES PLACED ALONG SHOULDER EDGES OR IN DROPOFFS SHALL HAVE A MINIMUM OF 600 mm FROM THE TOP OF THE CHANNELIZING DEVICE TO THE TOP OF THE PAVEMENT.

NO.	DATE	BY	APP'D
3			
2			
1			

KANSAS DEPARTMENT OF TRANSPORTATION
CHANNELIZING DEVICES

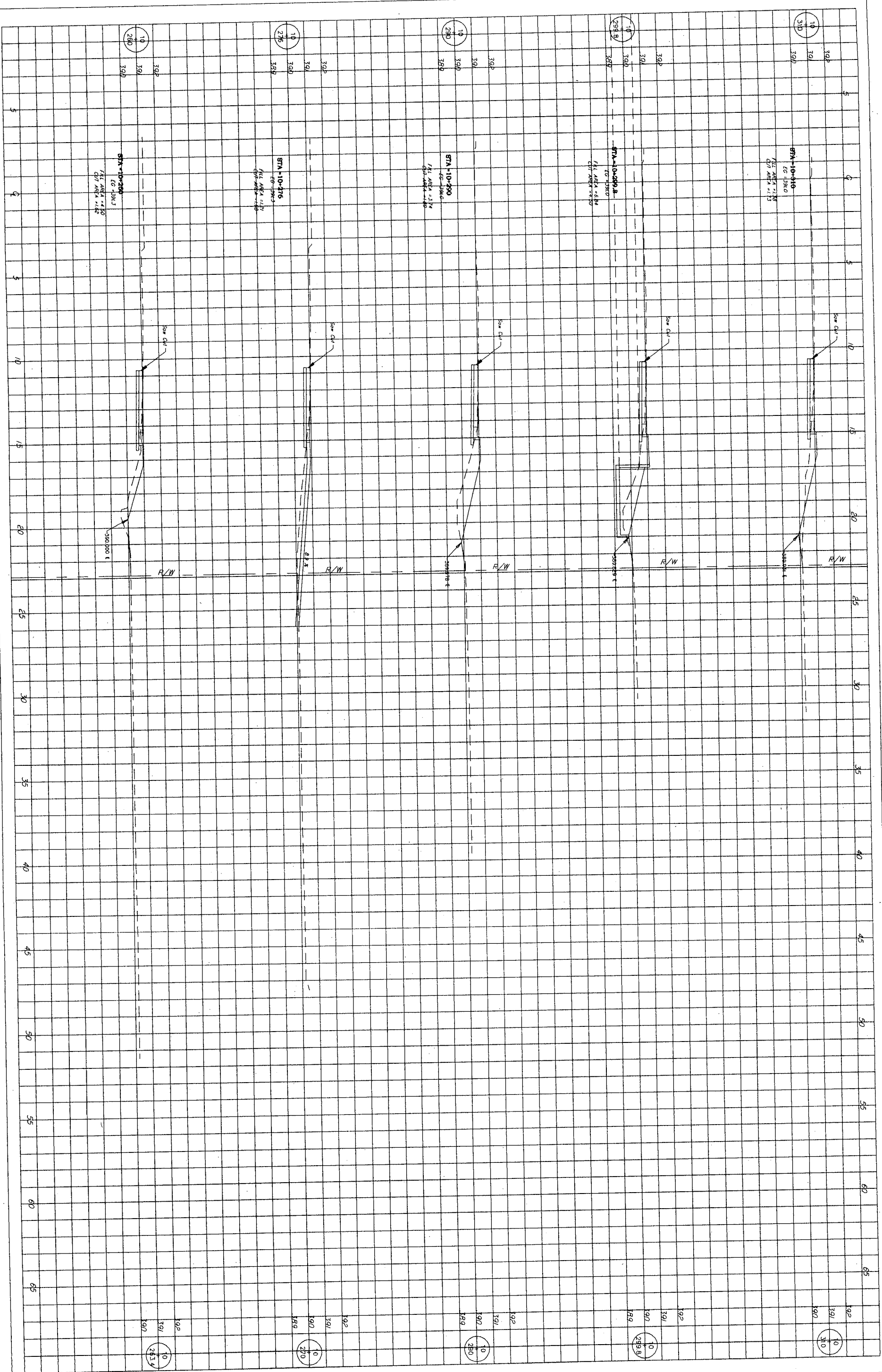
TE702SI	9/1/00
DESIGNED BY	DESIGNED BY
CHECKED BY	CHECKED BY
INTEGR. BY	INTEGR. BY
QUANTITY	QUANTITY
THICK. IN.	THICK. IN.



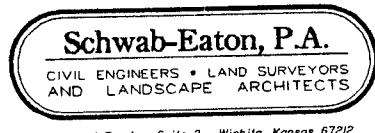
CITY OF WICHITA
CROSS SECTIONS
WICHITA, KANSAS



PROJECT NO. 200002	DATE: 01/15/00
DESIGNED BY: JAC	CHECKED BY: JAC
DRAWN BY: JAC	DATE: 01/15/00
SHEET NO. 18	SHEET TOTAL 21

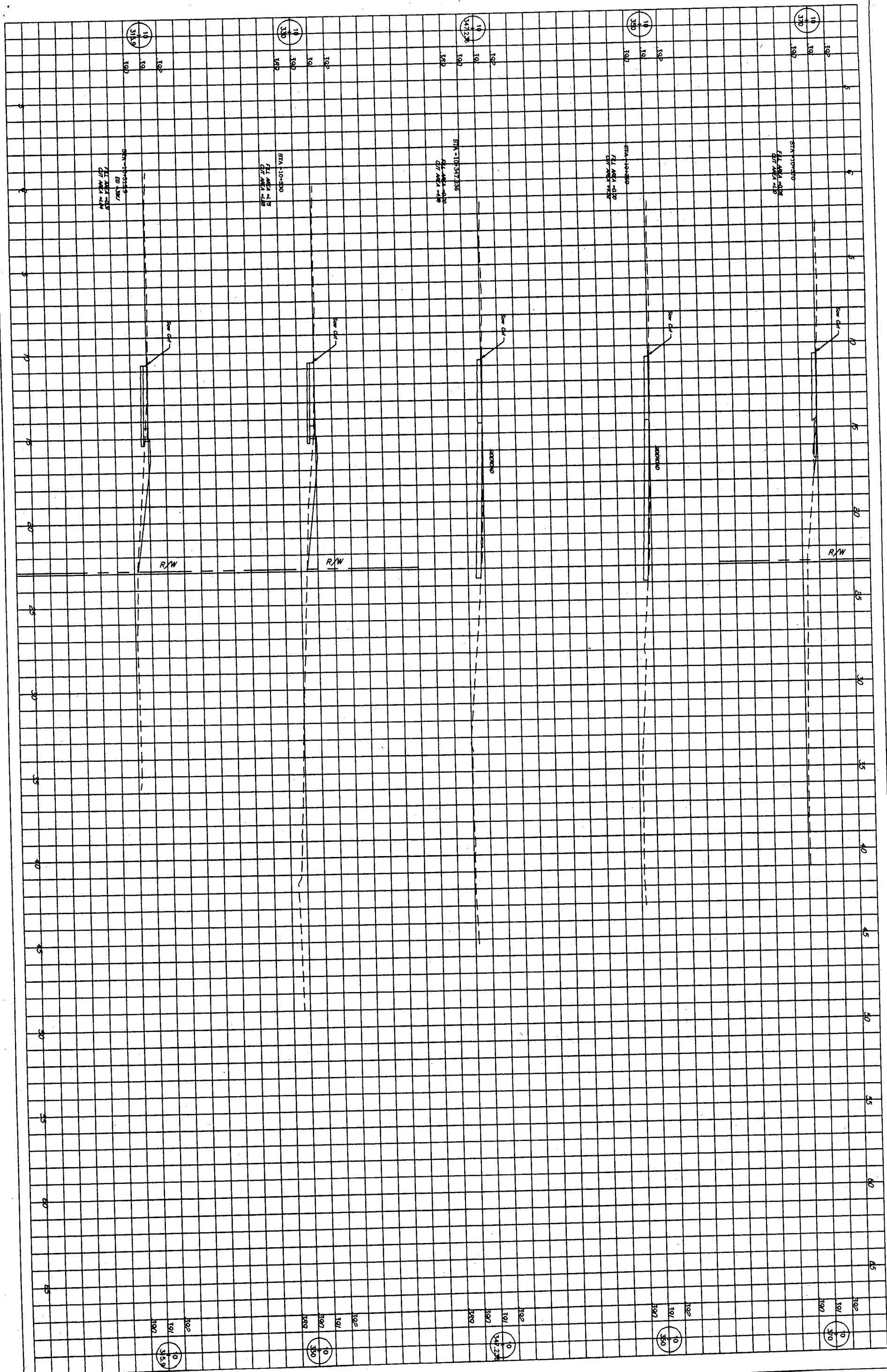


CITY OF WICHITA
CROSS SECTIONS
WICHITA, KANSAS

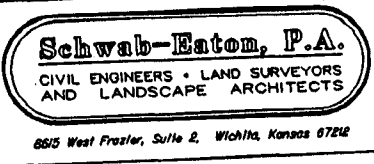


PROJECT NO. DW002
REVISED DATE:

CHECKED BY: CM
DRAWN BY: D.C.
DATE: MARCH 2004
SHEET NUMBER: 19
TOTAL SHEETS: 21

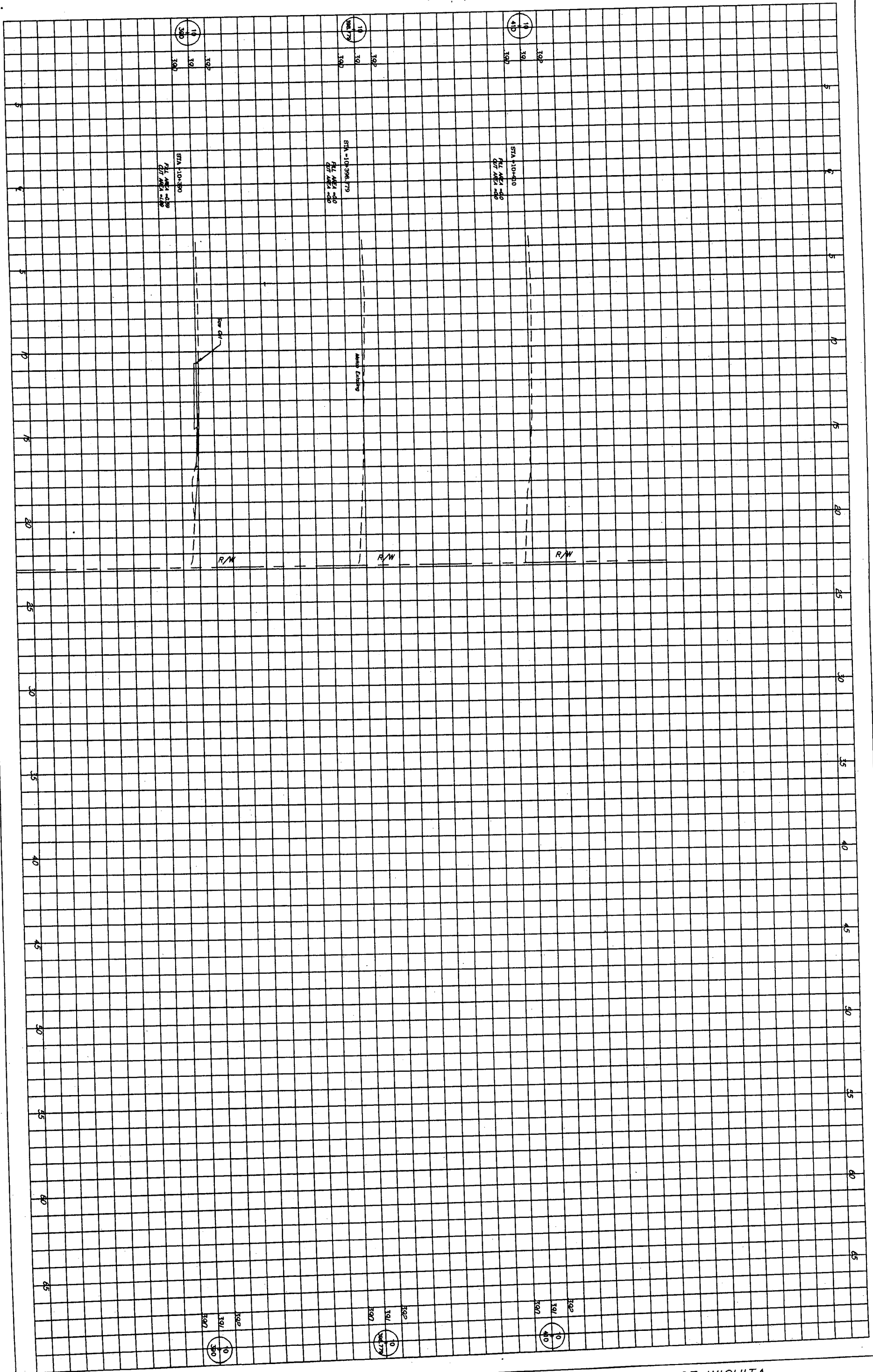


CITY OF WICHITA
CROSS SECTIONS
WICHITA, KANSAS

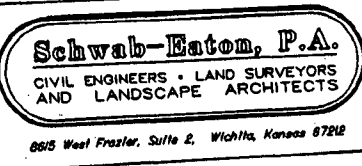


PROJECT NO. 010000
REVISED: DATE:

CHECKED BY:	CM
DRAWN BY:	DAC
DATE:	SEPTEMBER 2002
SHEET NUMBER:	20
TOTAL SHEETS:	21



CITY OF WICHITA
CROSS SECTIONS
WICHITA, KANSAS



PROJECT NO. 000000
REVISION DATE:

CHECKED BY: CM

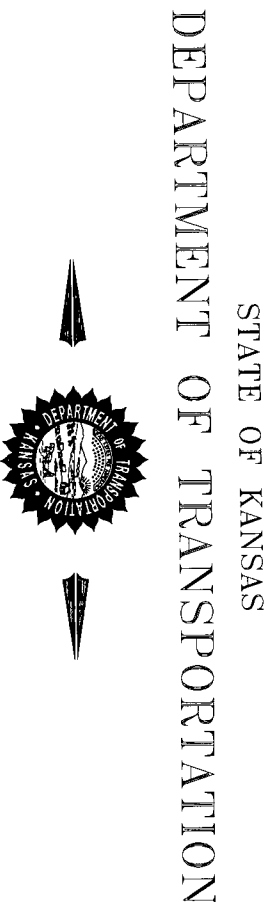
DRAWN BY: D.C.

DATE: SEPTEMBER 2002

SHEET NUMBER: 21

TOTAL SHEETS: 21

INDEX OF SHEETS
SHEET NO.: R-1 TITLE SHEET
R-2 TYPICAL SECTIONS AND GENERAL NOTES



RESURFACING

K-15 FROM KTA/I-35 TO I-135
Project No: 472-83363
O.C.A. No.: 706815
CITY OF WICHITA, SEDGWICK COUNTY, KANSAS
JIM ARMOUR, P.E. - ACTING CITY ENGINEER

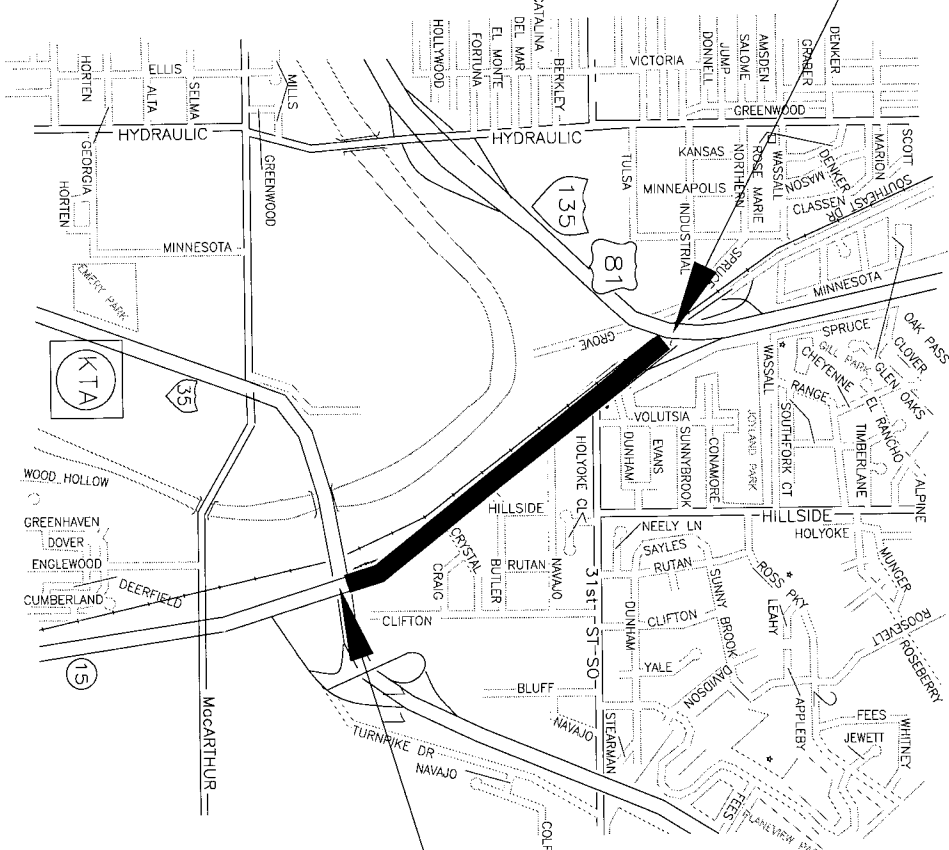
COLD MILLING
ASPHALT OVERLAY
ASPHALT SHOULDER REPAIR
PAVEMENT MARKINGS
CONCRETE BASE REPAIR

SHEET NO.	STATE	PROJECT NO.	YEAR	SHEET TOTAL
7	KANSAS	15-87-K-8014-01-01	2003	8-1 2

ITEM	DESCRIPTION	QUANTITY	UNIT
1	50mm Nominal Cold Milling	30218	SQ. M
2	25mm Reinf. Grd. Reinf. Overlay	1134	MT
3	50mm Reinf. Grd. Reinf. Overlay	4031	MT
4	150mm Asphalt Shoulder Repair (75m SC-1/75mm BC-1)	5961	SQ. M
5	100mm White Pavement Markings (Thermoplastic)	5378	M
6	100mm Yellow Pavement Markings (Thermoplastic)	3562	M
7	6" Reinf. Concrete Base Repair	31	M
8	6" Reinf. Concrete Base Repair	200	SQ. M
9	Sodding and Seeding	1	LS

DESIGN DESIGNATION
K-15
AADT (2002) = 32,900
Posted Speed Limit = 50 MPH (80 KPH)
GROSS LENGTH OF PROJECT
EXCEPTIONS
ADDITIONS
NET LENGTH OF PROJECT
GROSS LENGTH OF BRIDGES
GROSS LENGTH OF ROAD

1782 m
0.00 m
0.00 m
1782 m
0.00 m
1782 m



STA. 0+000
PROJECT NO. 15-87-K-8014-01-GI
KUNK IR RESURFACING @ KTA/I-35

STA. 1+890.729
PROJECT NO. 15-87-K-8014-01-GI
KUNK IR RESURFACING @ I-135

THE CITY OF WICHITA
K-15
FROM I-135 TO KTA/I-35

JIM ARMOUR, P.E. - ACTING CITY ENGINEER
S. BREITENBACH
PROJECT NUMBER
472-83363
DATE
NOV. 2003

CITY ENGINEER'S OFFICE
500 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 264-1511

APPROVED - DATE

JIM ARMOUR, P.E.
ACTING CITY ENGINEER
CITY OF WICHITA, SEDGWICK COUNTY, KANSAS

