

PHASE I
PAVING AND INCIDENTAL DRAINAGE IN
SHADY RIDGE ADDITION

AN ADDITION TO THE CITY OF WICHITA
SEDGWICK COUNTY, KANSAS

PROJECT NO. 472-84051

JIM ARMOUR, ACTING CITY ENGINEER

OCA 785888

SHADE COURT: SERVING LOTS 28 - 36, BLOCK 1, FROM THE WEST LINE OF SHADE LANE TO AND INCLUDING THE CUL-DE-SAC.

GENERAL NOTES

- UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA CONCRETE PAVEMENT AND ASPHALTIC CONCRETE PAVEMENT SPECIFICATIONS.
- CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF SEVENTY-TWO (72) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:
KANSAS ONE-CALL 1-800-344-7233
OR 687-2470 (LOCAL WICHITA)
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

SBC (TELEPHONE)	600-870-8330
COX COMMUNICATIONS (CABLE)	262-0661
WESTAR (ELECTRIC)	362-0677
KANSAS GAS SERVICE (GAS)	332-3711
CITY OF WICHITA WATER & SEWER MAINT.	262-8000
AQUILA (GAS)	946-0096

- 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.

- EXISTING UTILITIES AND THEIR LOCATIONS, 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

- 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 UNGAUNTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

- THIS PROJECT INCLUDES A CERTAIN AMOUNT OF ROLL TYPE CURB CONSTRUCTION. ROLL CURBS SHALL BE DERESSED THROUGH ALL DRIVEWAY OPENINGS WHEN SUCH DRIVES ARE CONSTRUCTED AS A PART OF THE PROJECT. NO MORE THAN 2 DRIVES 20 FEET IN WIDTH OR EQUIVALENT COMBINATIONS THEREOF ARE TO BE CONSTRUCTED WITH THIS PROJECT.

- TRANSITION CURB FROM FULL HEIGHT COMBINATION CURB AND GUTTER TO ROLL TYPE COMBINATION CURB AND GUTTER IS TO BE PAID AS BID FOR LINEAL FEET COMBINED CURB AND GUTTER (3 5/8" ROLL).

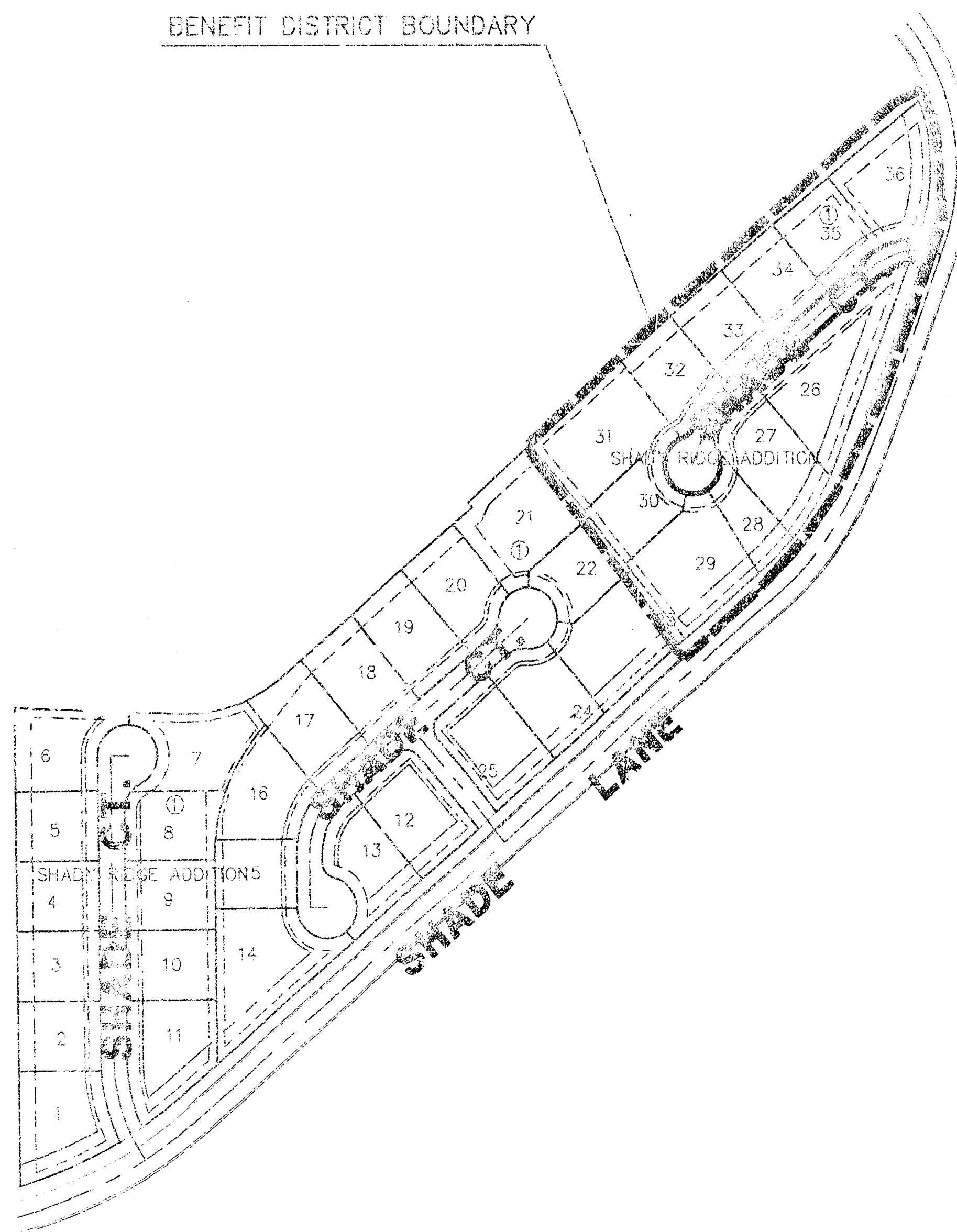
- A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF THE EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ADJUTS AN EXISTING SURFACE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. SAW JOINT TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND 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 SURFACE OR PAVEMENT.

- CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS WITH RYE GRASS AT A RATE OF 200 POUNDS PER ACRE. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION.

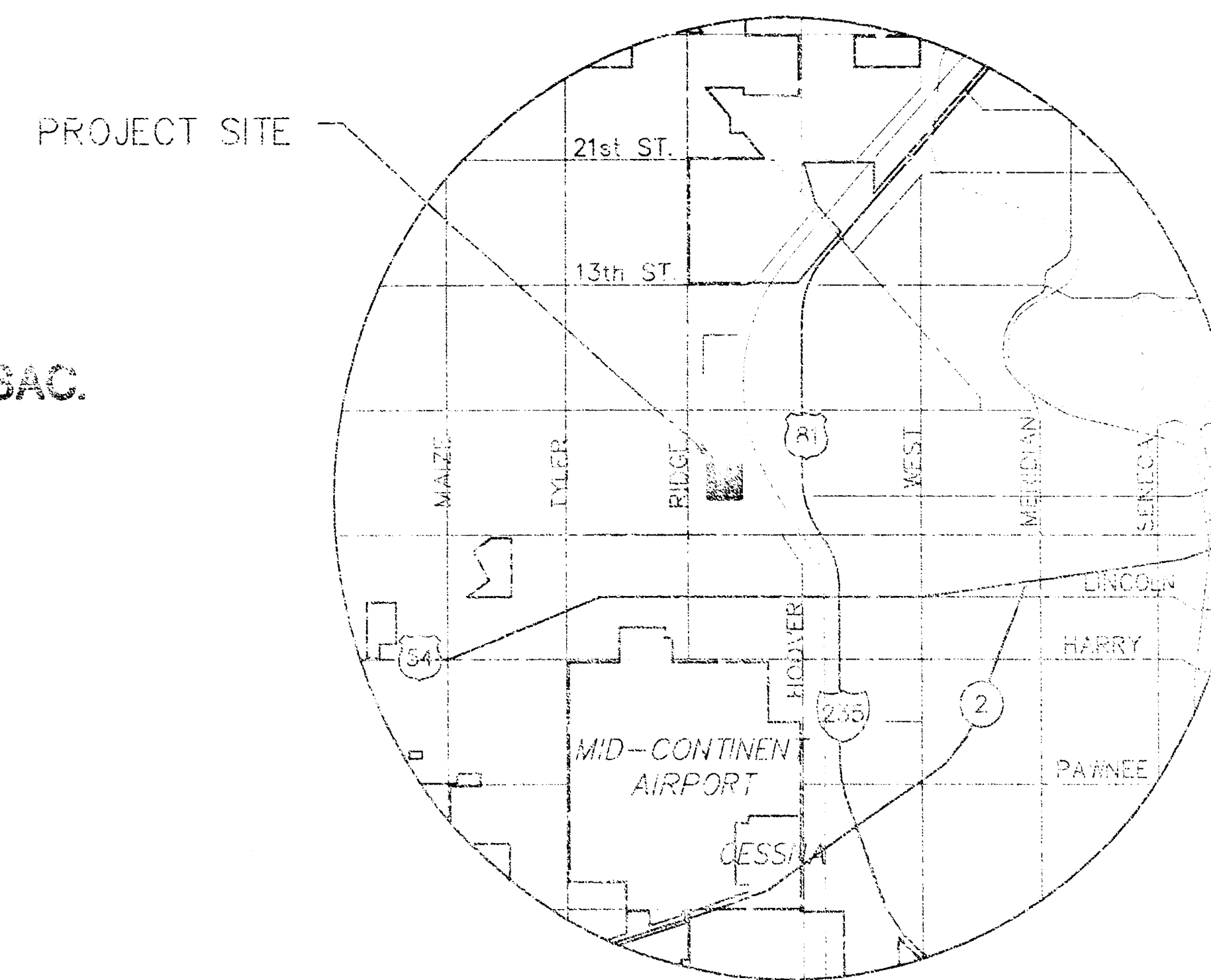
CENTRAL AVE.

BENEFIT DISTRICT BOUNDARY

RD. RIDGE



SW COR., NW 1/4, SEC. 22,
T27S, R1W



LOCATION MAP

INDEX TO DRAWINGS

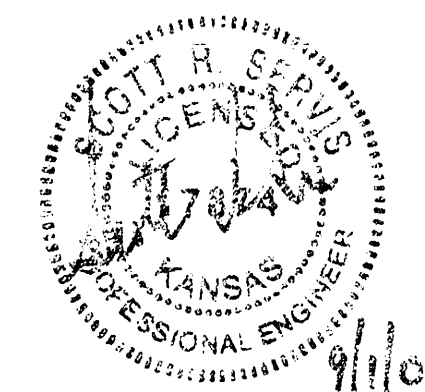
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3-4	PAVING DETAILS
5	SIGNING DETAILS
6	PAVING PLANS
7-9	BMP DETAILS
10-11	CROSS SECTION
12	FINAL PLAT

SCALE: 1" = 150'

BENCHMARKS

BW #1 City Disc NW corner RCBG West side of Shade and Winterset at SW corner of inlet.
Elev. 127.21' City Datum
1341.61' NGVD

BW #2 Square cut NW corner S. side Shade at P.C. of Lot 1, Blk. 1, Farmington Square 2nd Add.
Elev. = 146.06' City Datum
1333.46' NGVD



LENGTH OF PROJECT
29' BK-BK..... 411.52 L.F.
EXCAVATION..... 847 C.Y.
COMPACTED FILL... (90%)..... 40 C.Y.
BORROW..... 0 C.Y.



SHADY RIDGE ADDITION

PROJECT NAME

PHASE I PAVING PLANS

SHEET TITLE

SRS

DESIGN BY:

KWS

DRAWN BY:

CJA

CHECKED BY:

AUGUST 2004

DATE

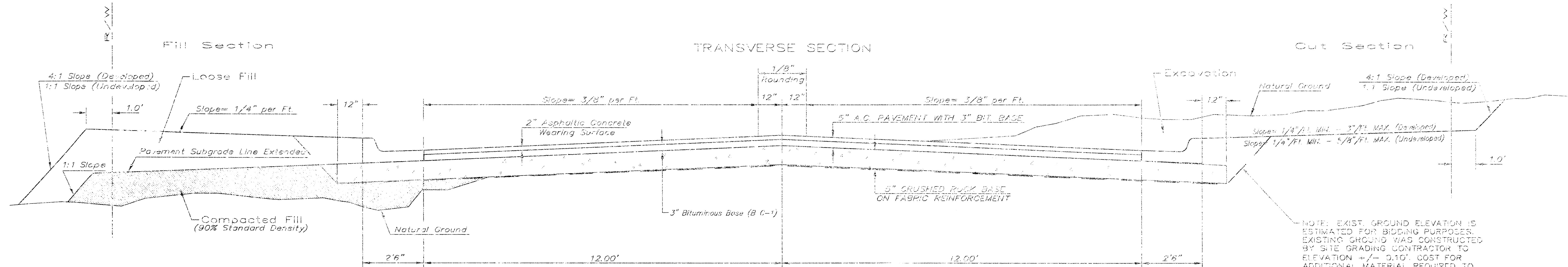
04071-ET

JOB NO.

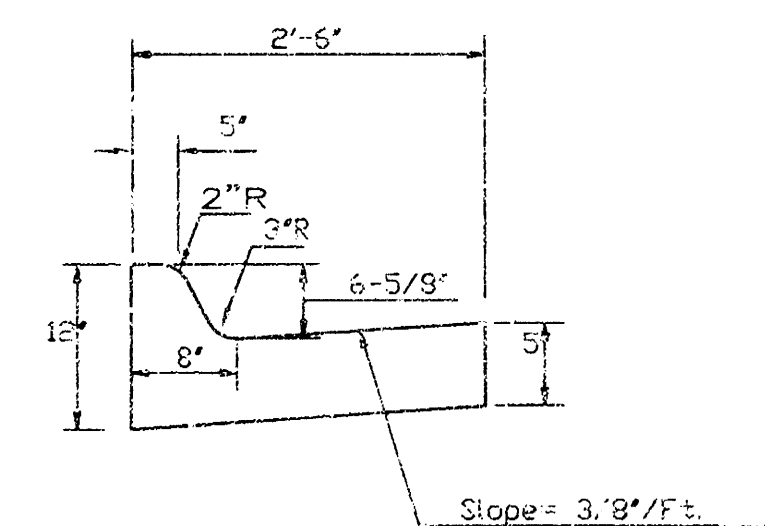
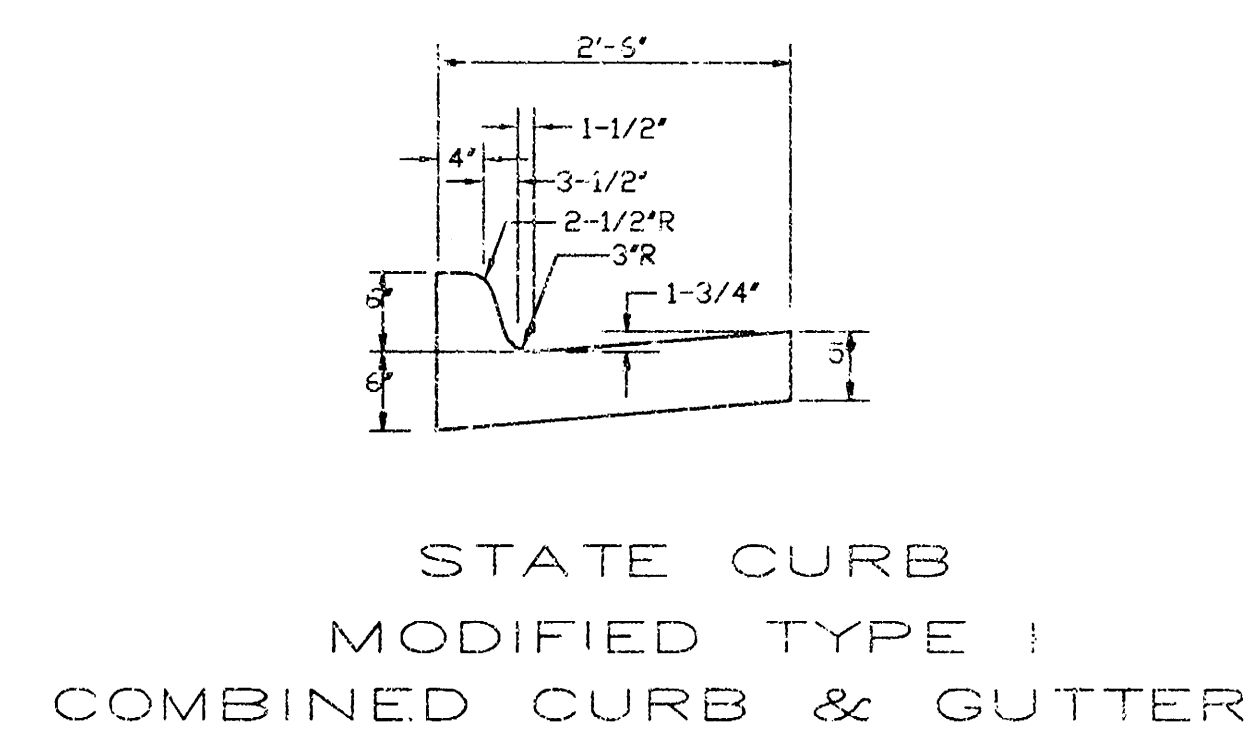
1 / 12

SHEET/OF

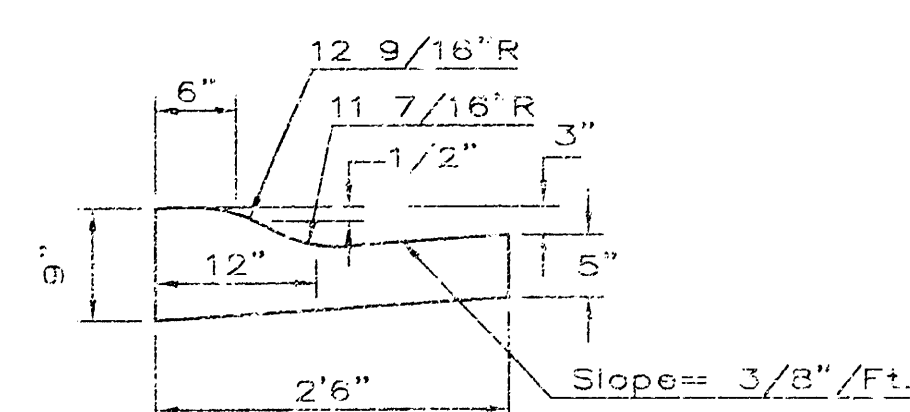
TYPICAL 29' B-B PAVEMENT DETAILS



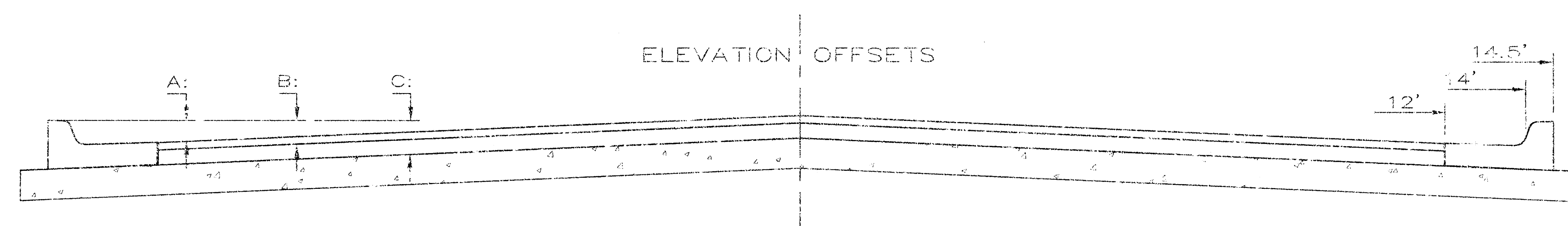
NOTE: EXIST. GROUND ELEVATION IS ESTIMATED FOR BIDDING PURPOSES. EXISTING GROUND WAS CONSTRUCTED BY SITE GRADING CONTRACTOR TO ELEVATION +/- 0.10'. COST FOR ADDITIONAL MATERIAL REQUIRED TO BACKFILL BEHIND CURBS SHALL BE SUBSIDIARY TO THE PROJECT.



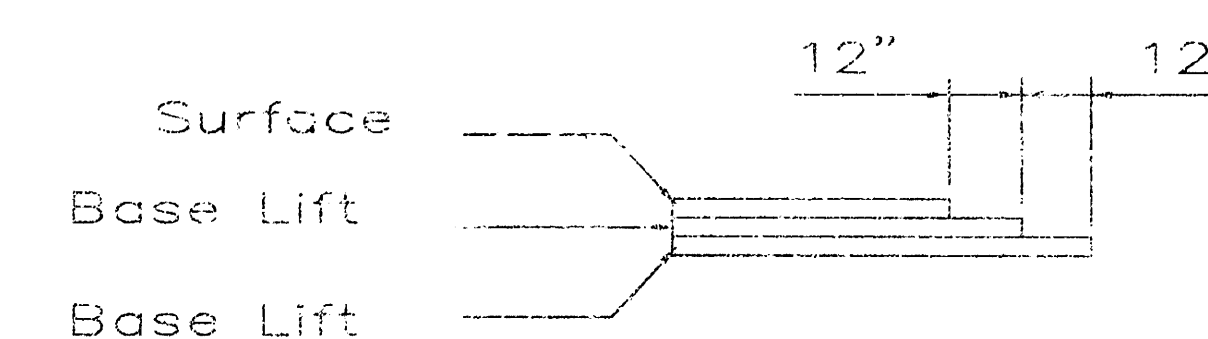
COMBINED CURB & GUTTER



COMBINED ROLL TYPE CURB &
GUTTER



	DISTANCE FROM CENTERLINE (L.T. & R.T.)										
	0'	2'	4'	6'	7'	8'	10'	12'	14'	14.5'	15.5'
A: Top of Curbs to Top of Surface Lift	0.13	0.18	0.24	0.30	0.33	0.36	0.43	0.49	—	—	—
B: Top of Curbs to Top of Upper Base Lift	0.30	0.35	0.41	0.47	0.50	0.53	0.60	0.66	—	—	—
C: Top of Curbs to Top of R.R. Subgrade	0.55	0.60	0.66	0.72	0.75	0.78	0.85	0.91	0.97	0.98	1.01



TRANSVERSE CONSTRUCTION JOINTS

Transverse construction joints shall be constructed in flexible base pavement at locations where pavement joints exist in existing flexible base pavement as shown by the detail. All costs associated with the construction of the transverse joint shall be included in the bid price for Square Yards 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE).

General Notes

FABRIC BASE REINFORCEMENT SHALL BE 8 X 1100 GEGRID AS MANUFACTURED BY TENSAR CORPORATION OR APPROVED EQUAL. FABRIC BASE REINFORCEMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CRUSHED ROCK SHALL BE UNIFORMLY GRADED FROM 1-1/2" MAXIMUM SIZE TO NOT MORE THAN 10% PASSING A NO. 200 SIEVE. ROCK QUALITY SHALL BE THE SAME AS SPECIFIED FOR COARSE AGGREGATE FOR CONCRETE MIXES.

ROCK BASE IS TO BE COMPACTED AND SMOOTHED WITH A STEEL FACED ROLLER PRIOR TO PLACEMENT OF ASPHALT. TACK COAT WILL NOT BE APPLIED TO ROCK BASE.

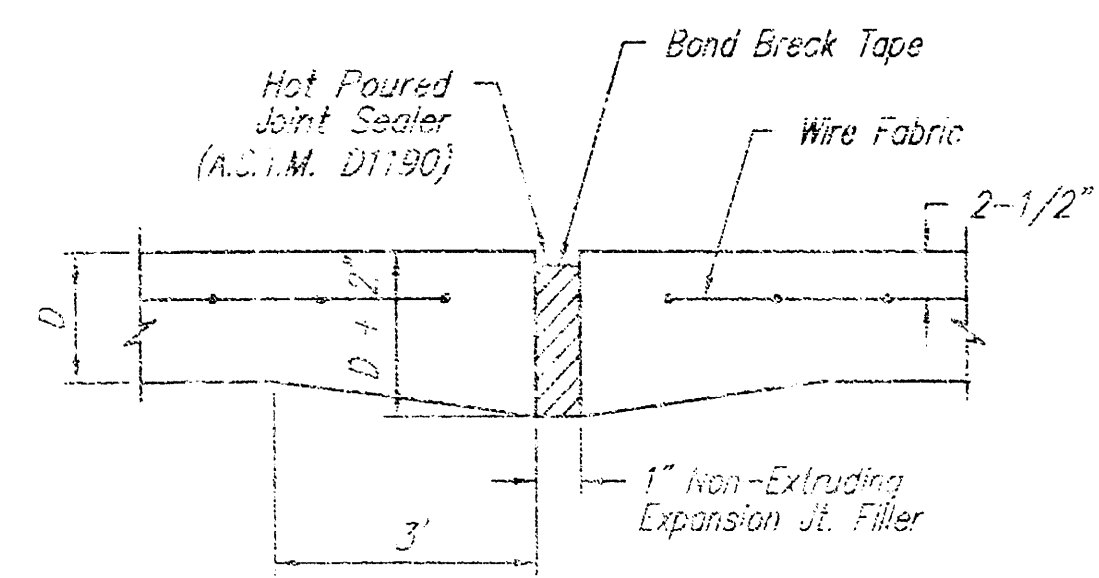
A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

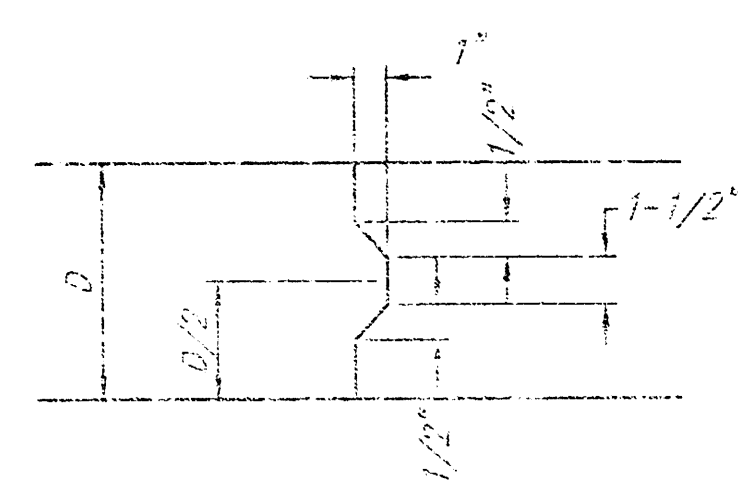
THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE
COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE
YARDS OF 5" ASPHALTIC CONCRETE (3" BITUMINOUS BASE.)

	29' PAVEMENT 5" ASPHALTIC CONCRETE W/ CABLED ROCK BASE	
	NEIL D. CABLE, P.E. - CITY ENGINEER	
	PROJECT NUMBER 472-84051	CCA NUMBER 76588E
	DATE AUG 04	SHEET 2 OF 12

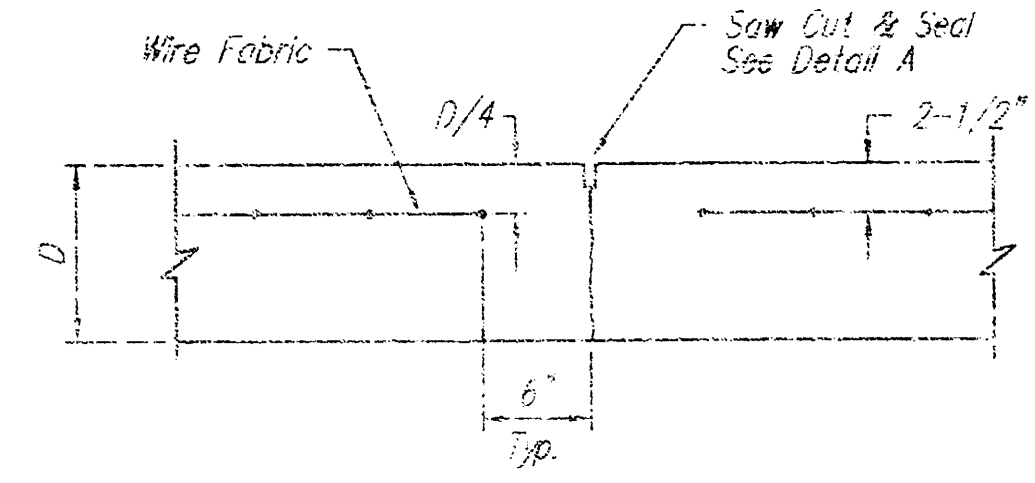


EXPANSION JOINT

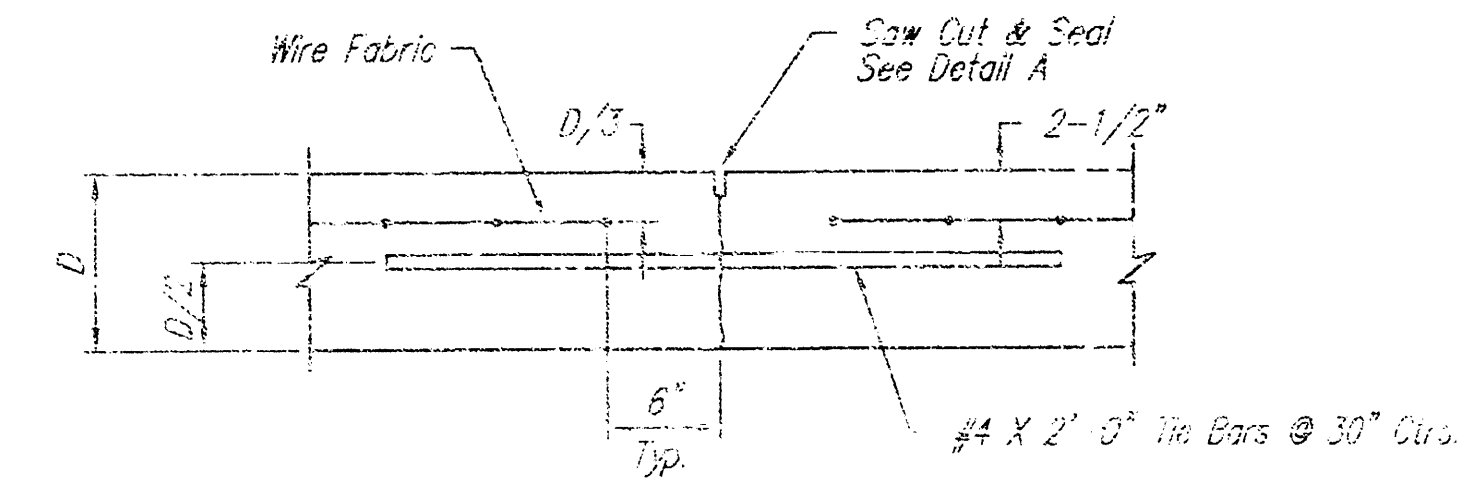
NOTE: Extra Thickness to be Subsidiary to Price of Square Yards Pavement



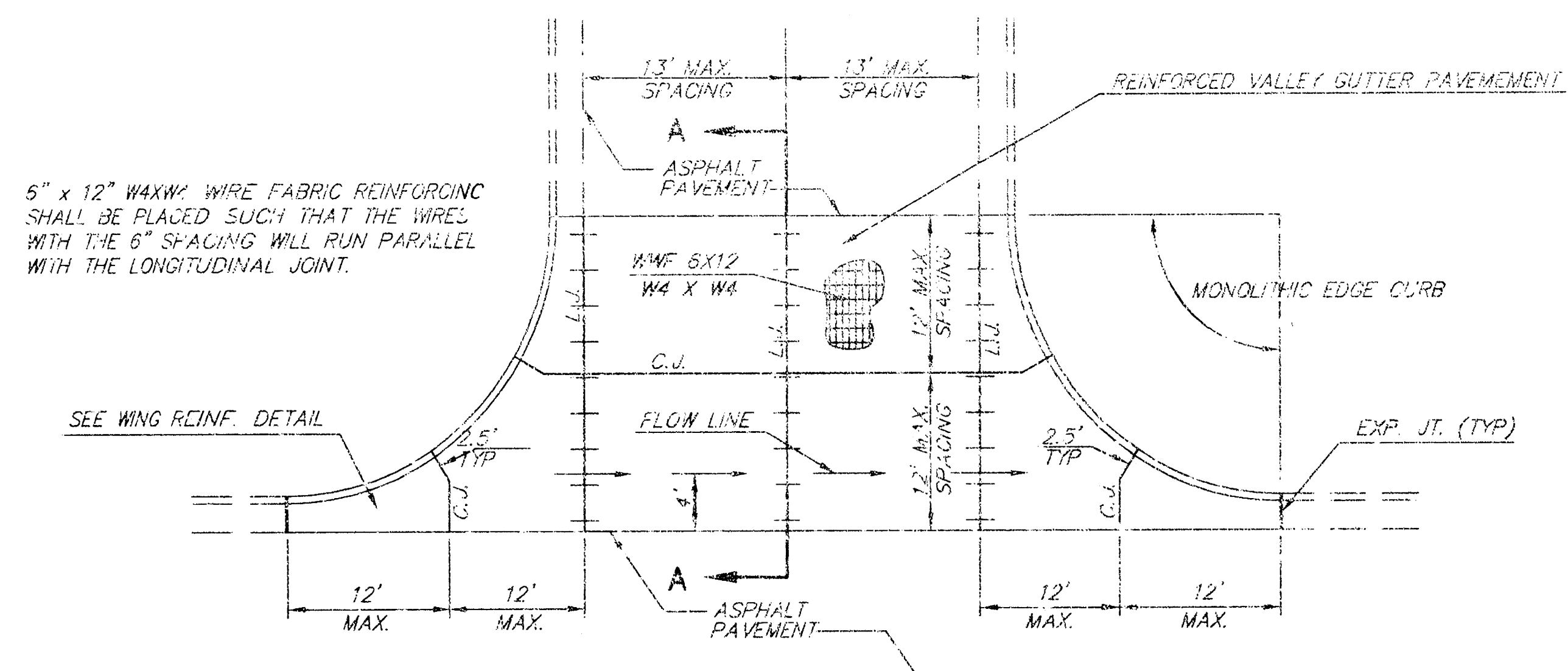
KEYWAY DETAIL



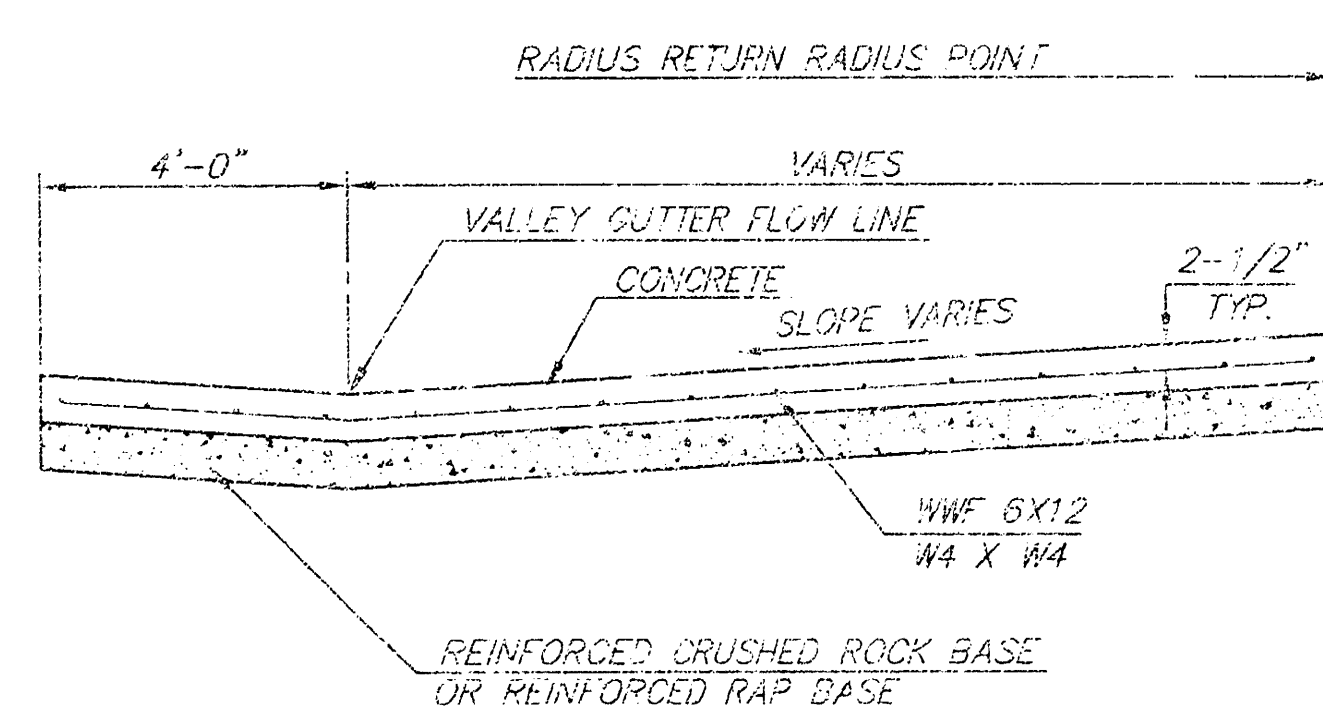
CONTRACTION JOINT DETAIL (C.J.)



LONGITUDINAL JOINT DETAIL (L.J.)

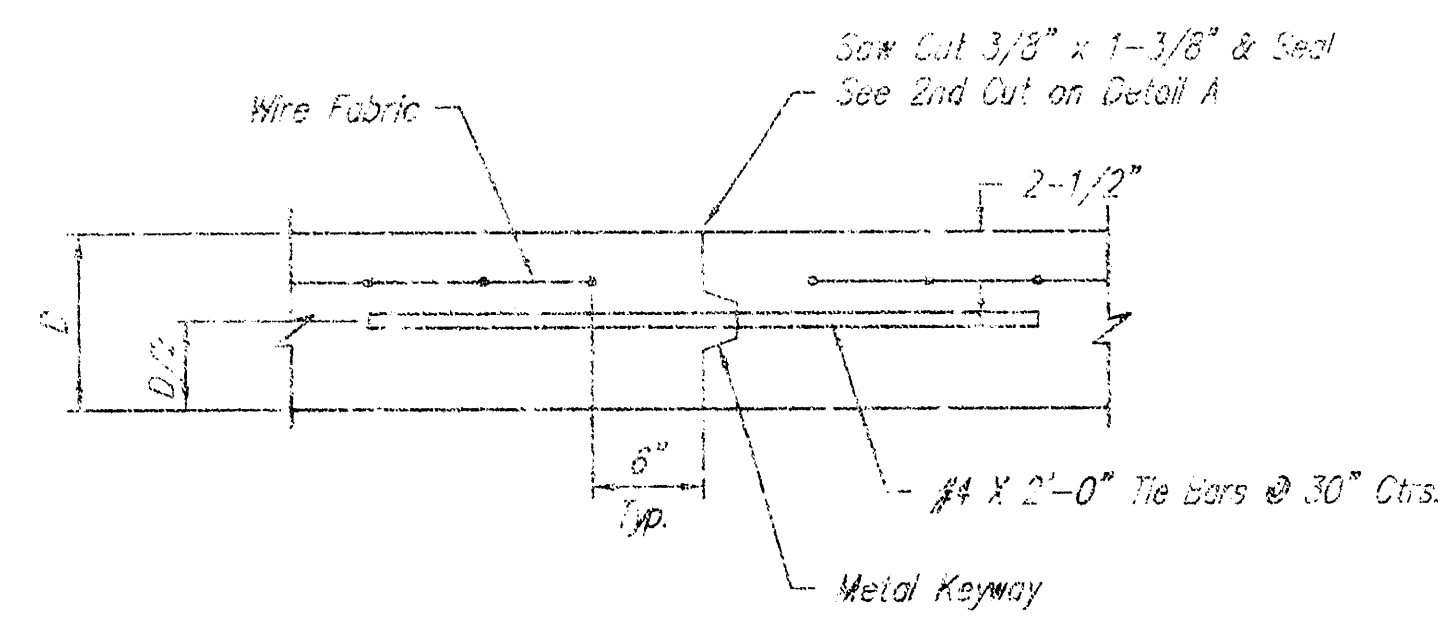


PLAN

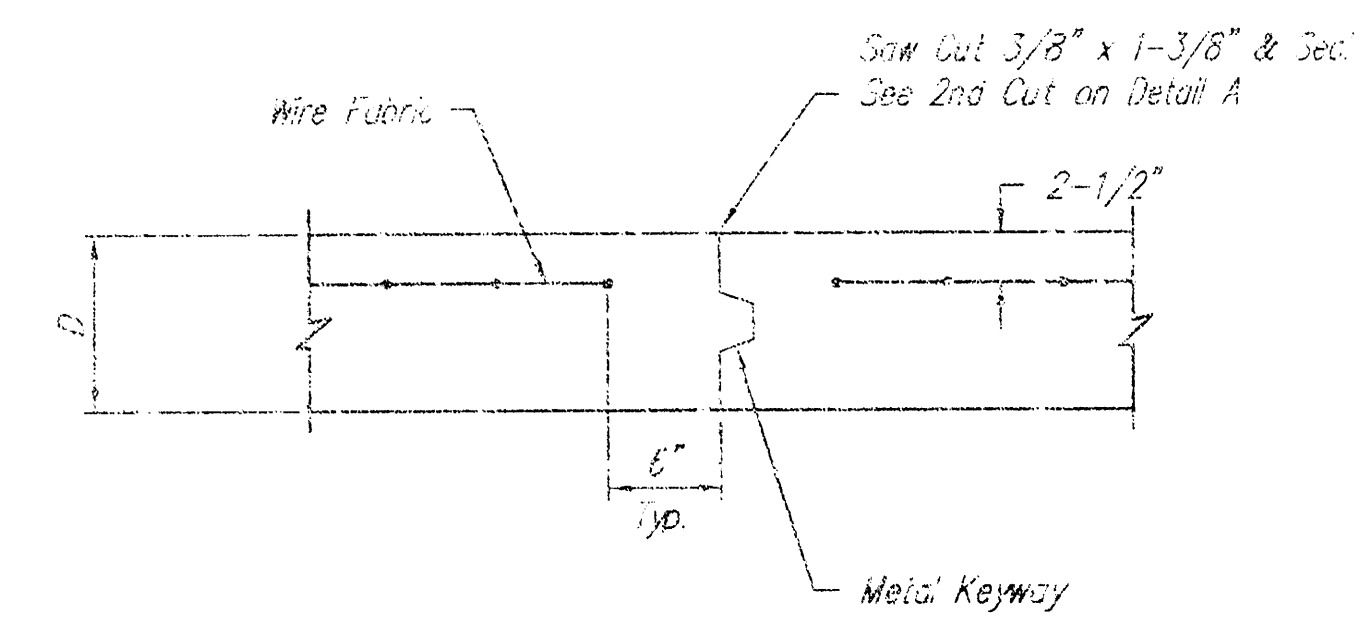


SECTION A-A

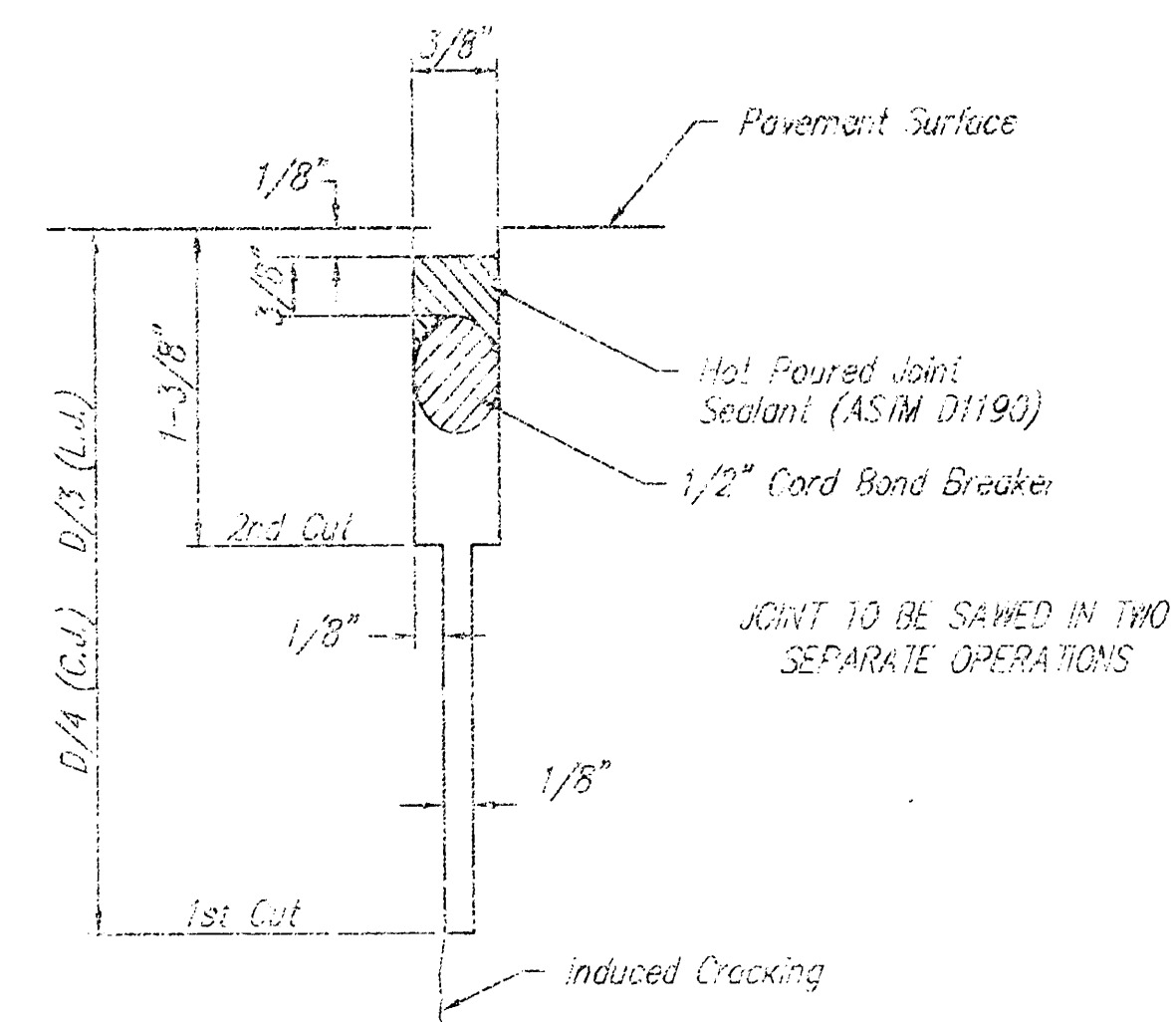
REINFORCED VALLEY GUTTER DETAIL



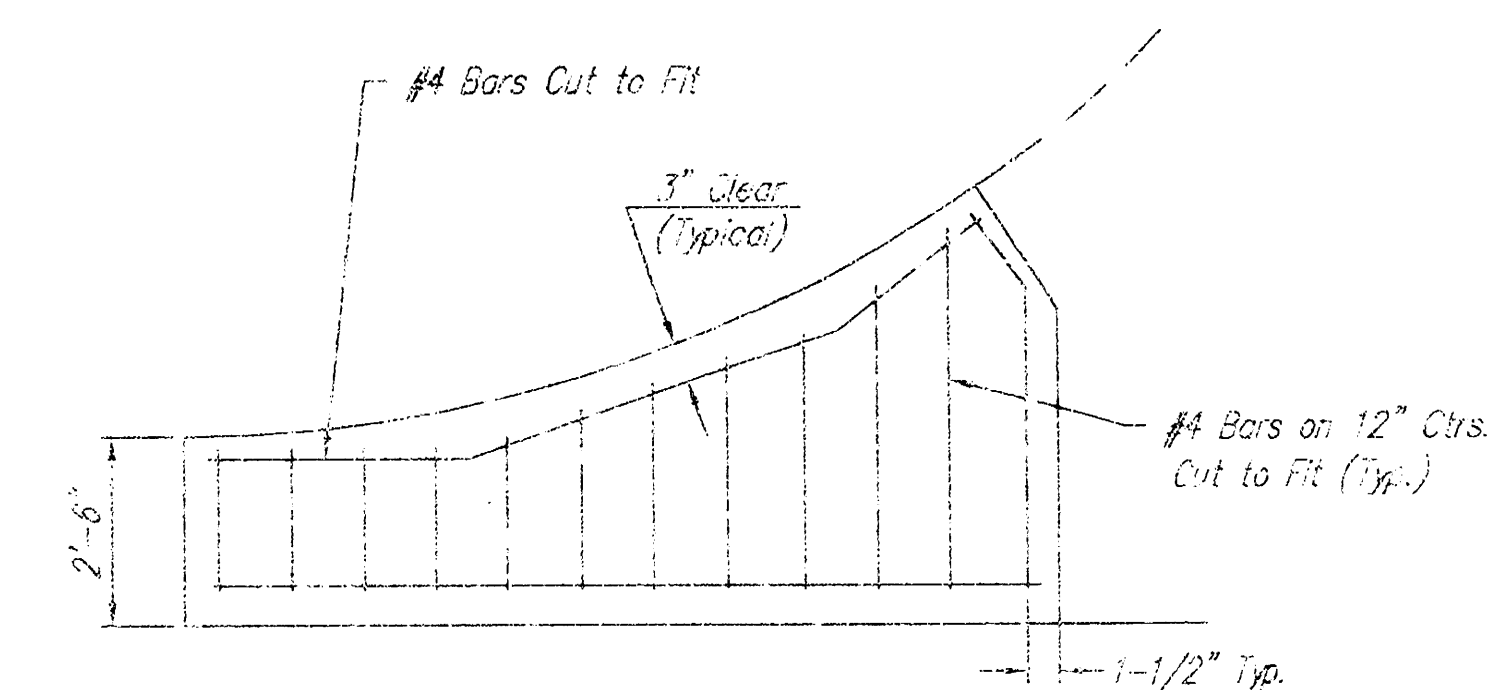
OPTIONAL LONGITUDINAL JOINT DETAIL (L.J.)



OPTIONAL CONTRACTION JOINT



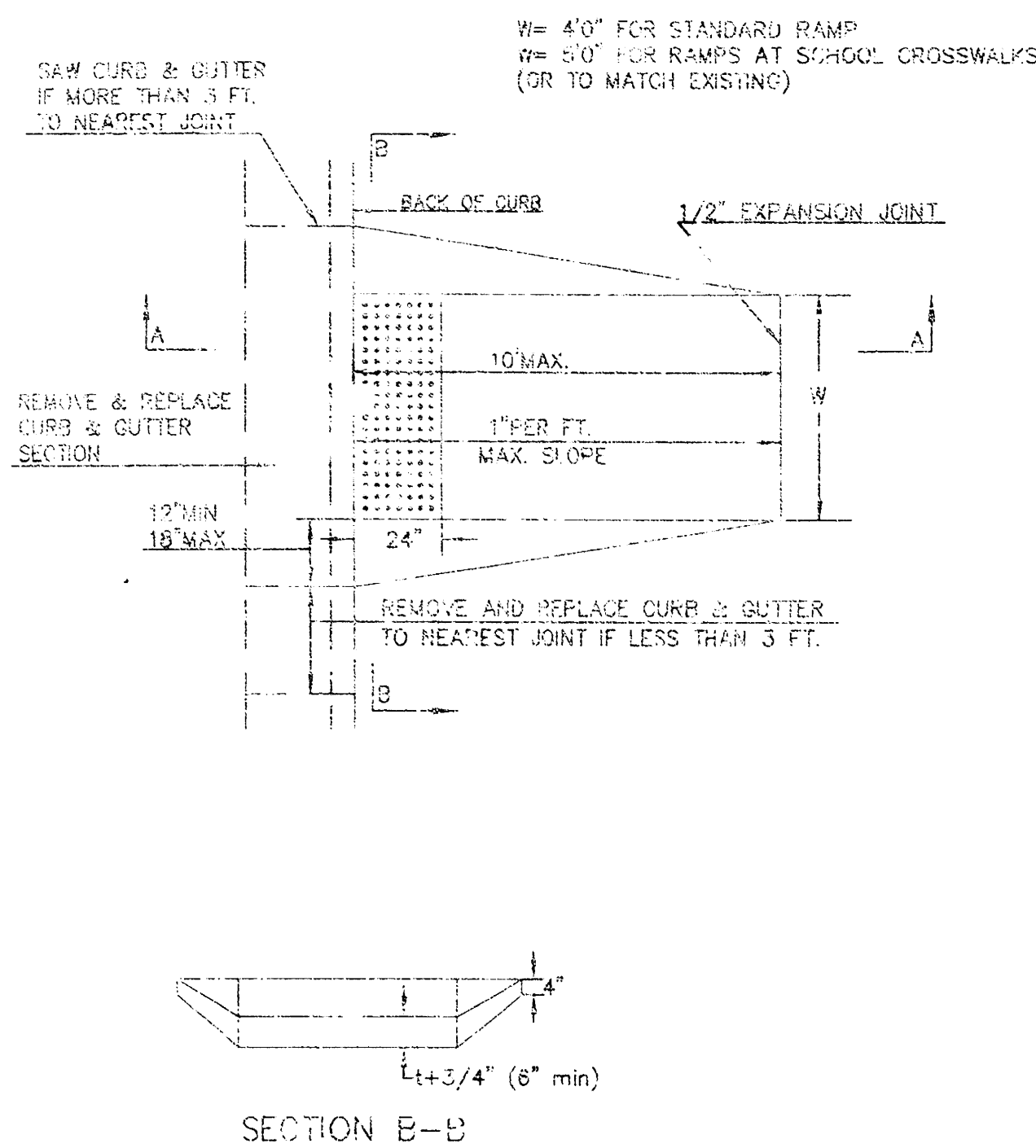
SAW JOINT DETAIL



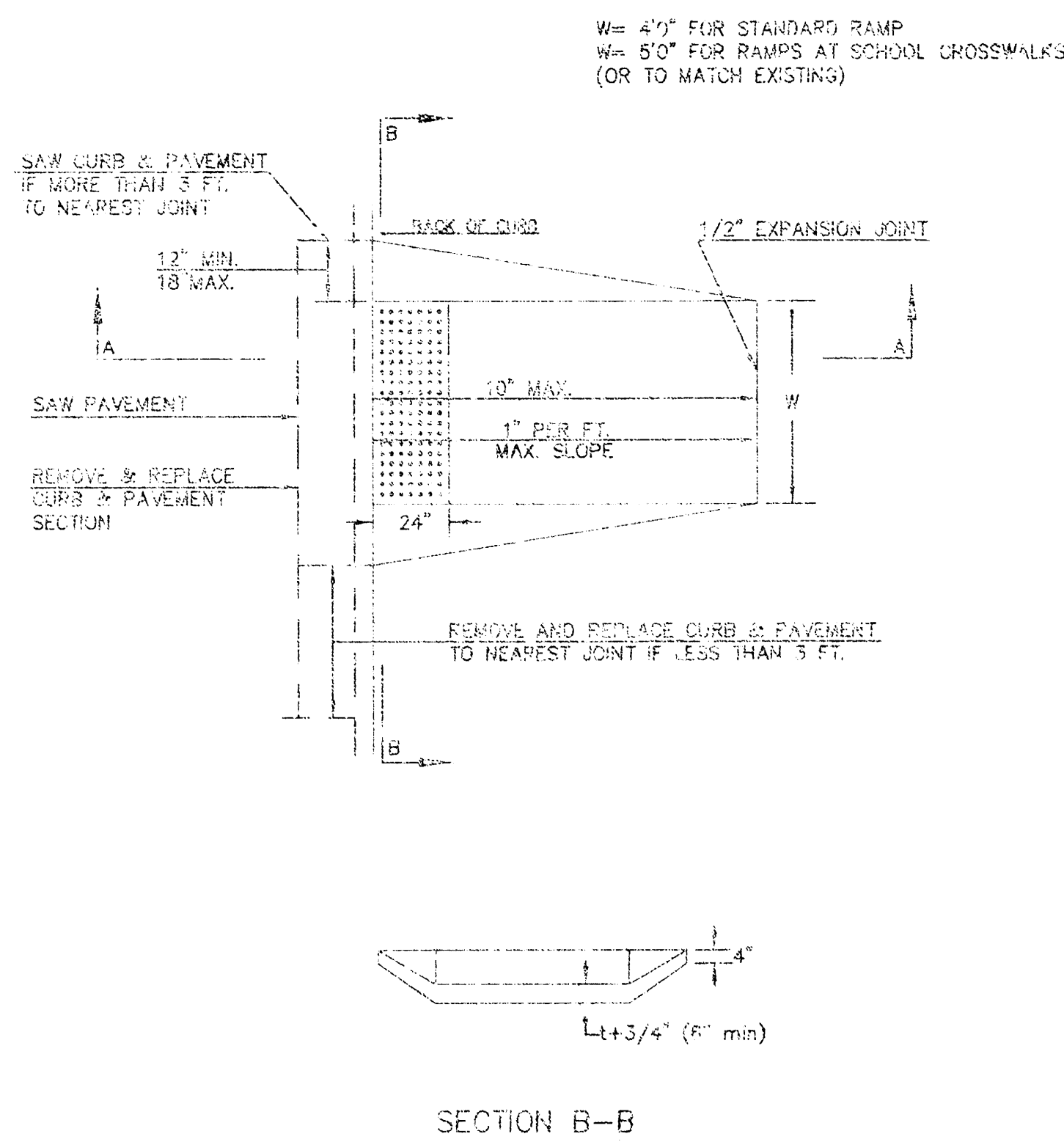
WING REINFORCING DETAIL

THE CITY OF WICHITA CITY ENGINEER'S OFFICE CITY HALL - EIGHTH FLOOR 450 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4501 (316) 268-4114 FAX	VALLEY GUTTER DETAILS	
	NEIL D. CABLE, P.E. - CITY ENGINEER	
	PROJECT NUMBER 472-84051	OGA NUMBER 765885
	DATE AUG 2004	SHEET 3 OF 12

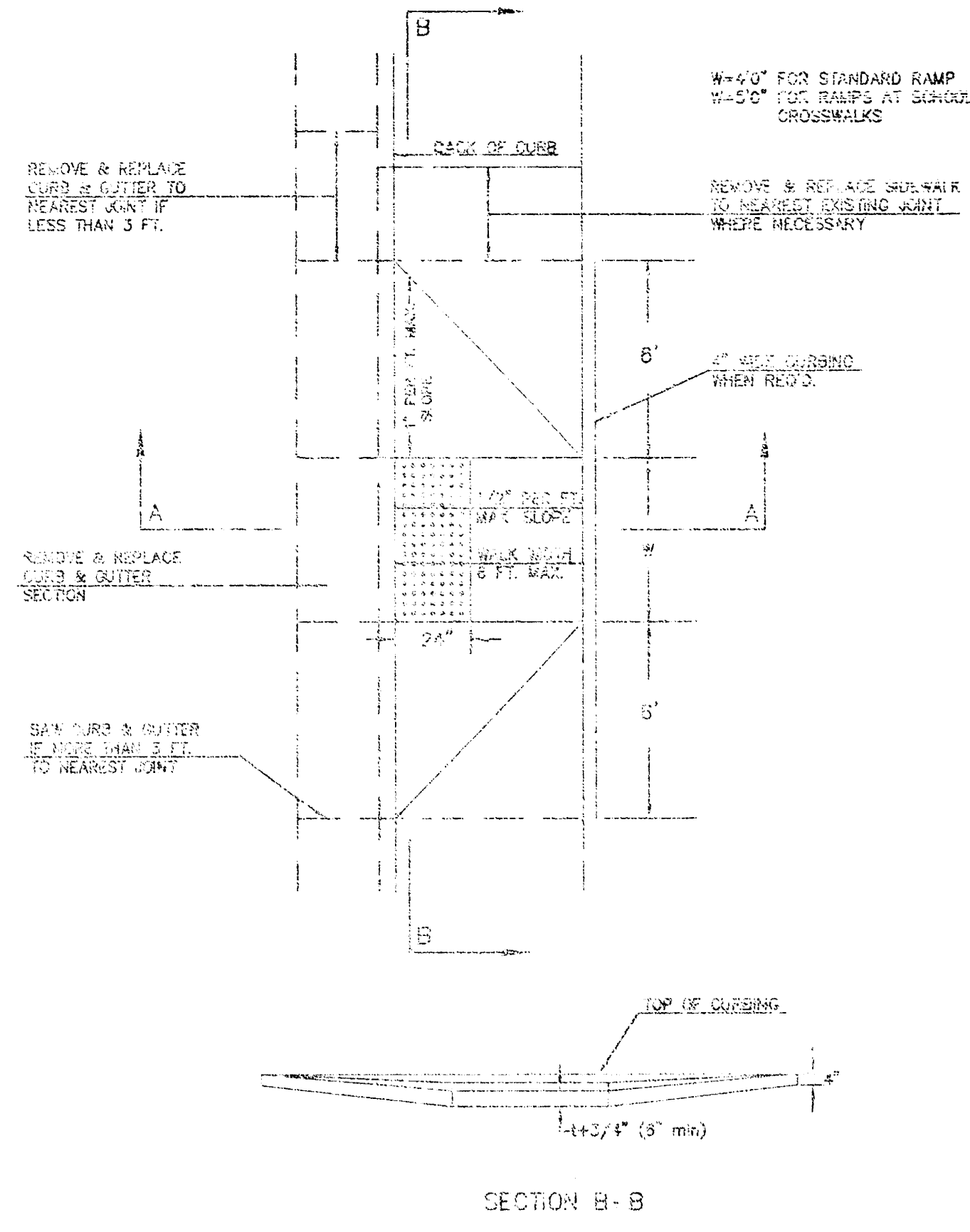
**STANDARD WHEELCHAIR RAMP
CONSTRUCTION DETAIL FOR STREETS
WITH COMBINED CURB & GUTTER
(TYPE A)**



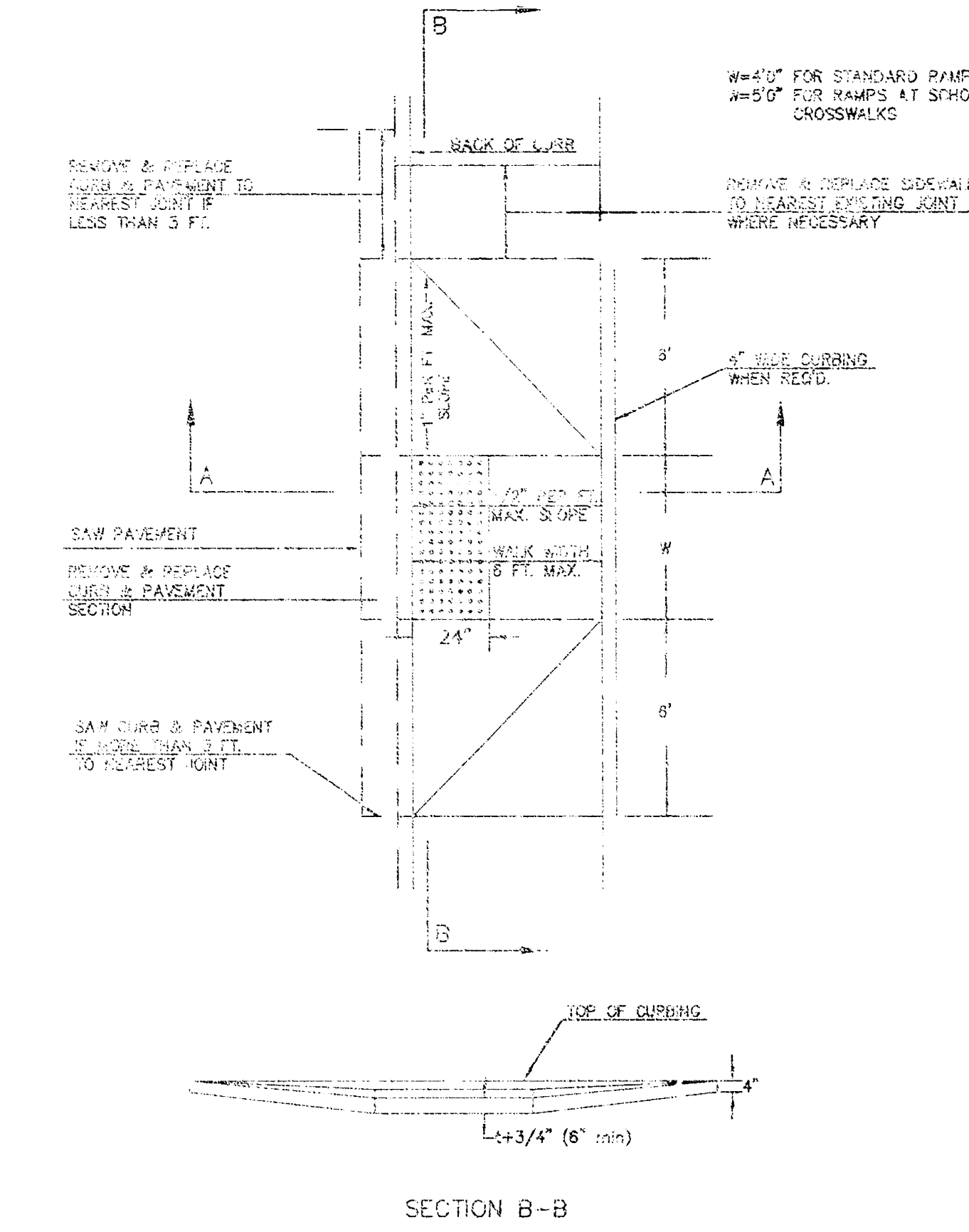
**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
CONCRETE STREETS WITH MONOLITHIC CURB
(TYPE A)**



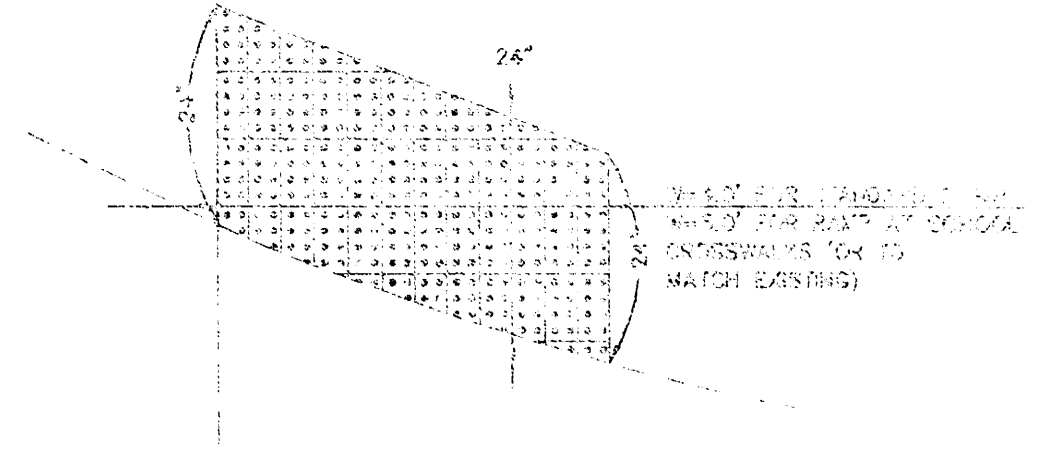
**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREETS WITH COMBINED CURB & GUTTER AND FULL WALK
(TYPE B)**



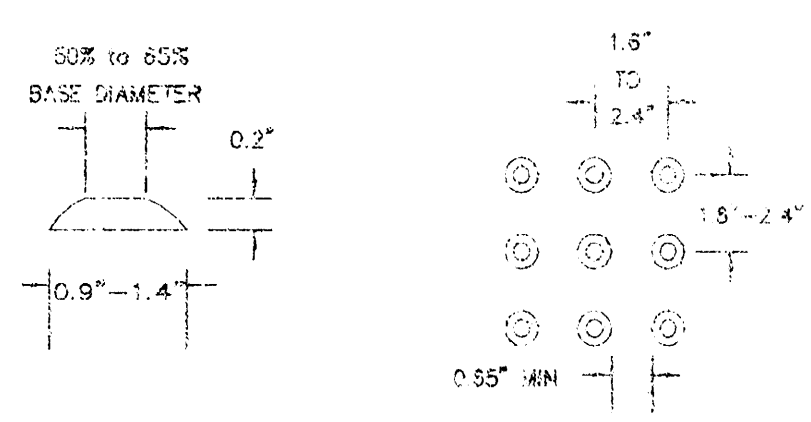
**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREETS WITH MONOLITHIC CURB AND FULL WALK
(TYPE B)**



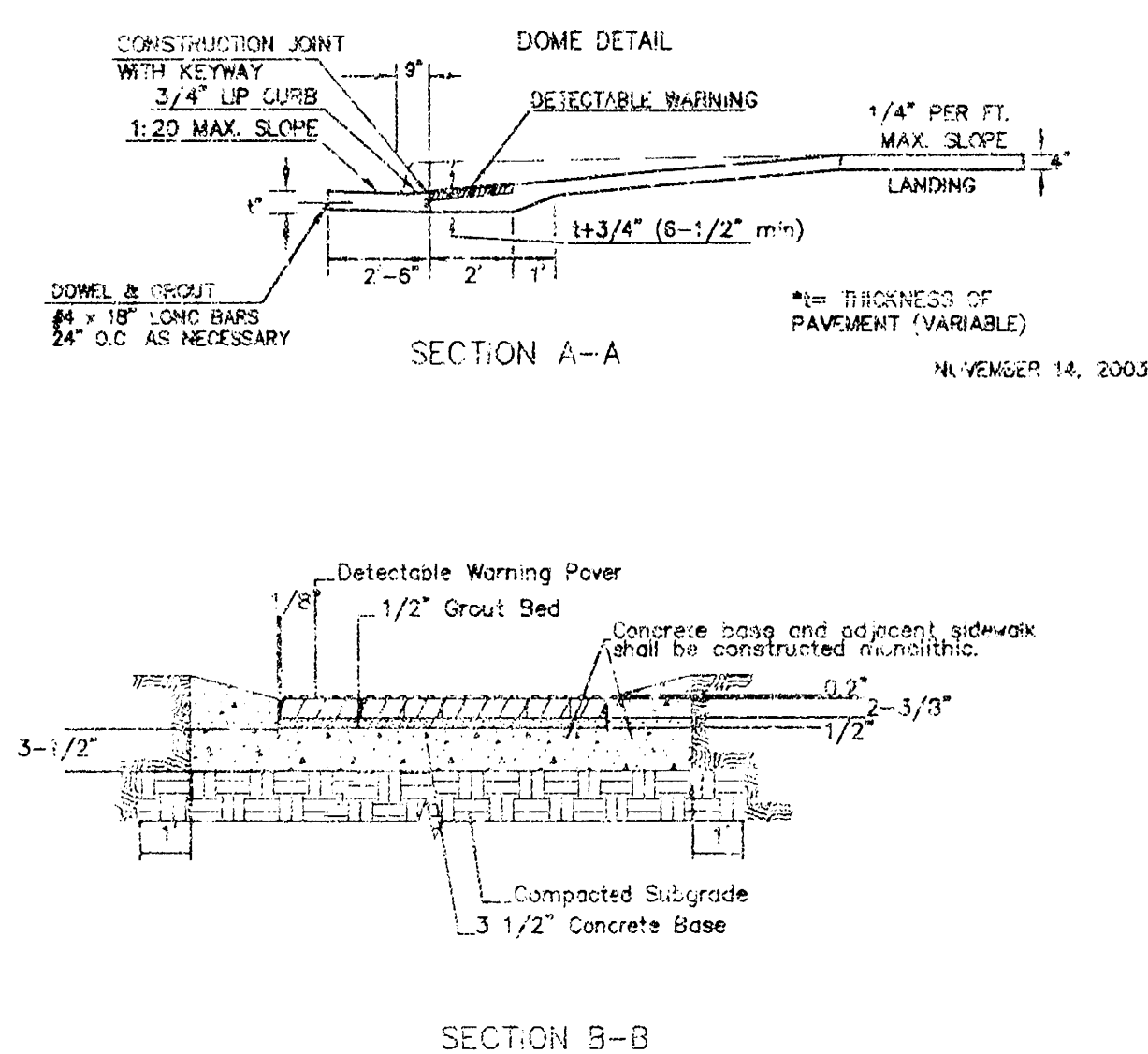
TYPICAL BRICK PATTERN



**BRICK PATTERN WHEN RAMP
INTERSECTS A RADIUS**



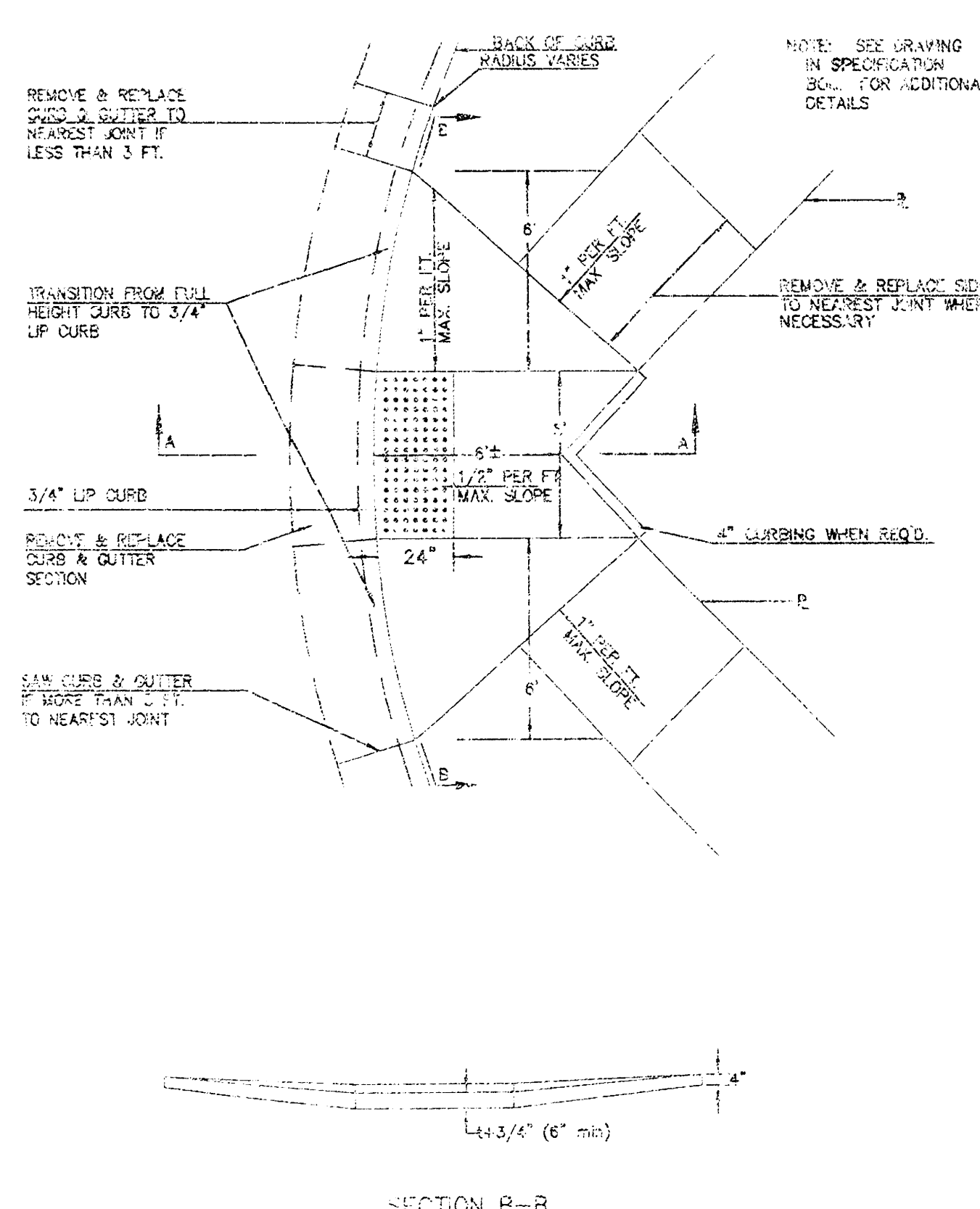
DOME DETAIL



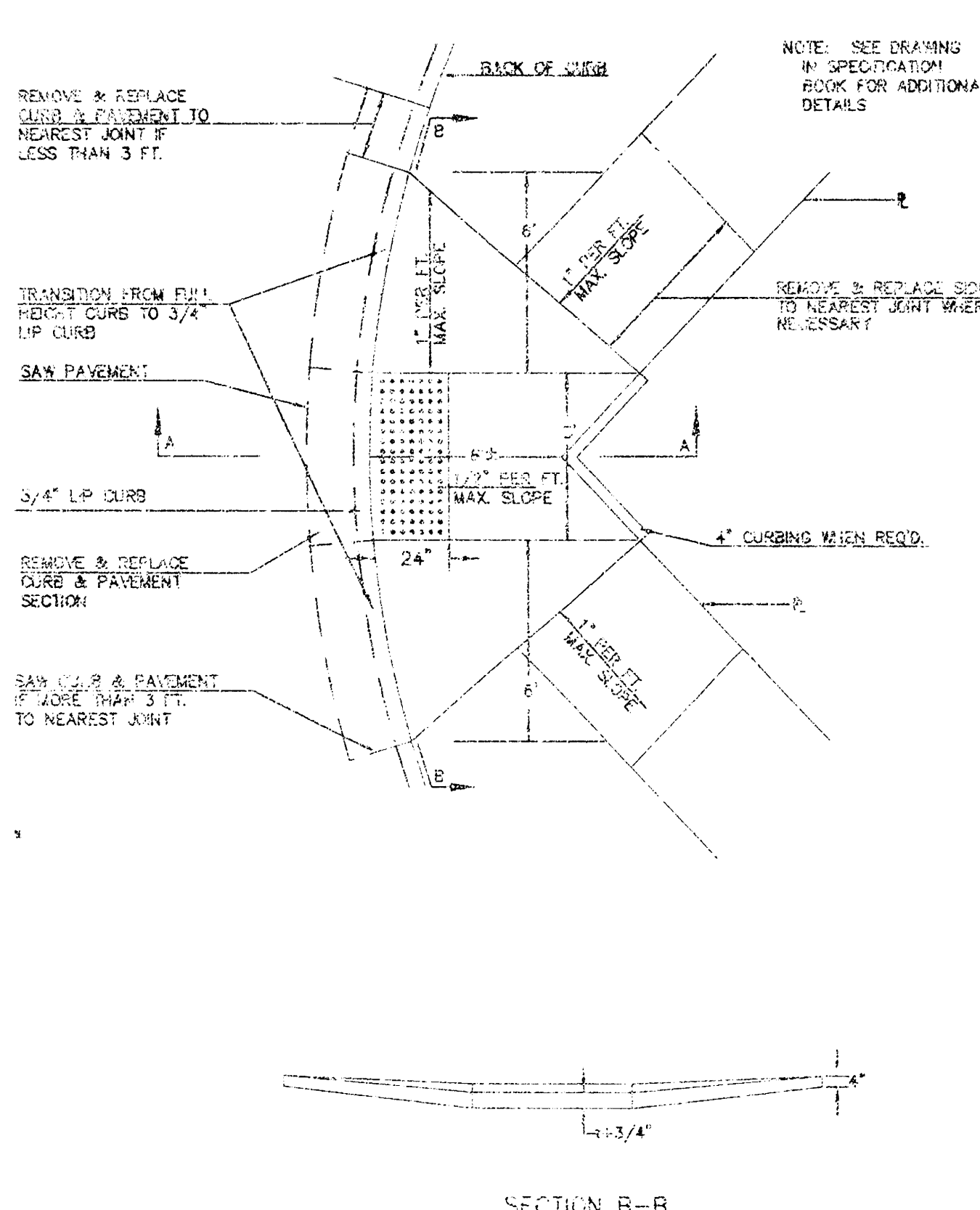
TYPICAL SECTION DETECTABLE WARNING PAVER

NOTE: RAMP TO CURB WITH 1/2" MAX. SLOPE. PAVEMENT DETECTABLE WARNING PAVERS FOR AN APPROVED (CUL) SHALL BE USED IN ALL WHEELCHAIR RAMP. THE DET. PAV. SHALL BE INSTALLED USING A RAMP DET. PAV. PATTERN. OTHER PATTERNS MAY BE USED WITH APPROVAL OF ENGINEER. SHOW FULL JOINTS. SHOW JOINTS IN THE DIRECTION OF TRAVEL.

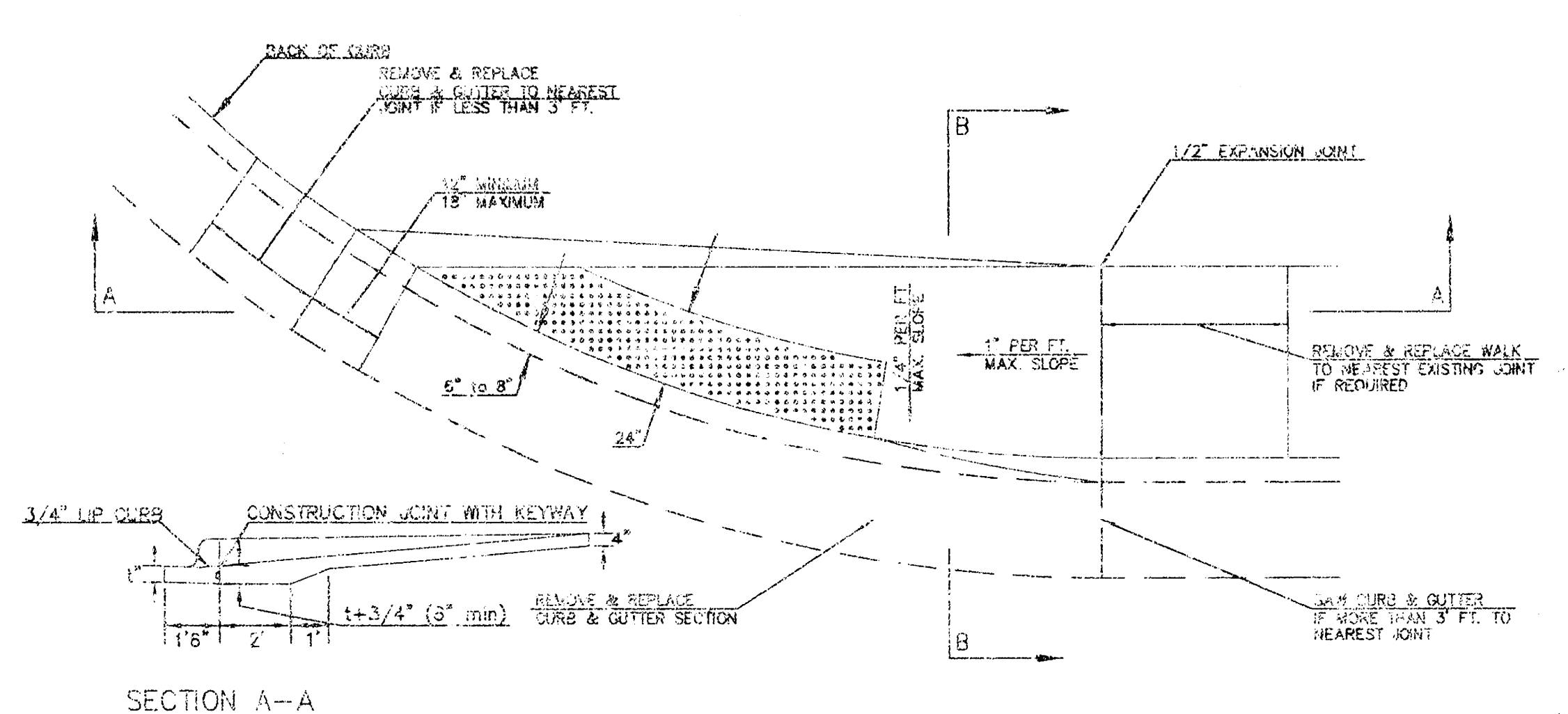
**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREET WITH COMBINED CURB AND GUTTER ON RADIUS
WITH 8" FROM BACK OF CURB TO PROPERTY CORNER
(TYPE C)**



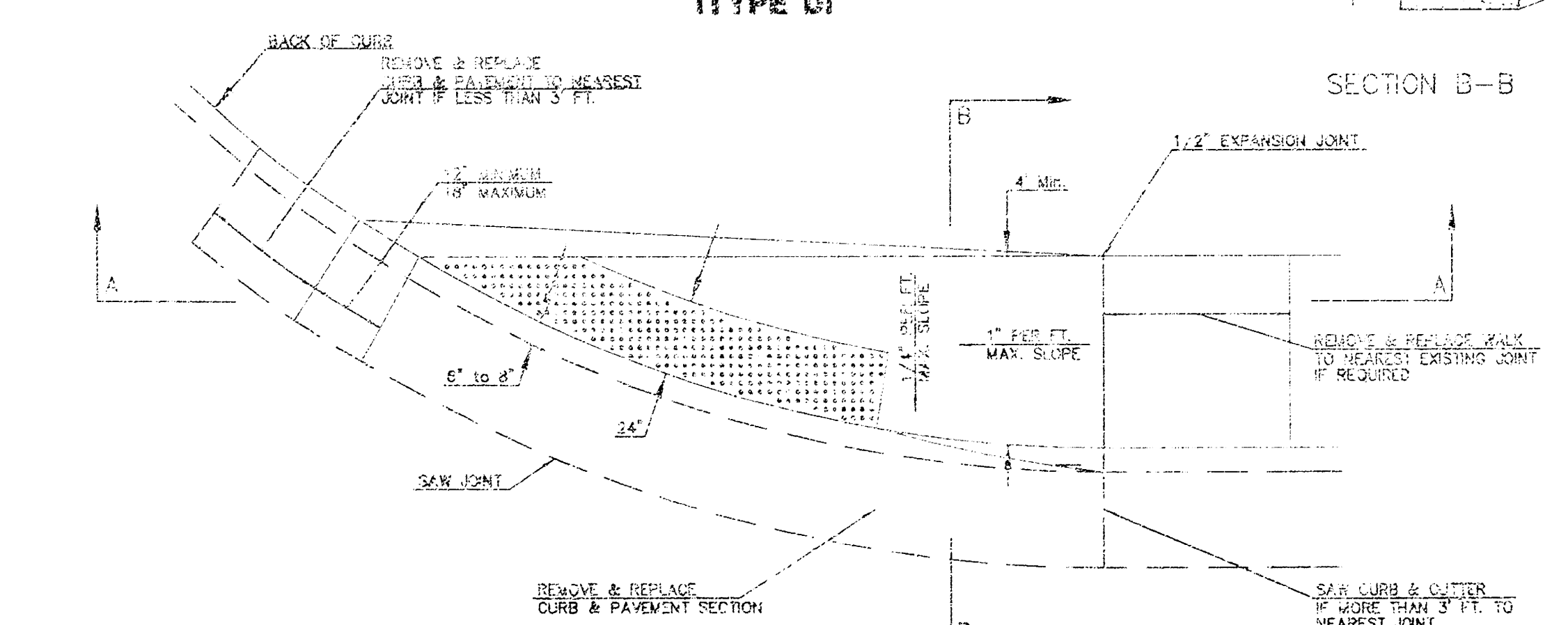
**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREET WITH MONOLITHIC CURB ON RADIUS
WITH 8" FROM BACK OF CURB TO PROPERTY CORNER
(TYPE C)**



**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREETS WITH COMBINED CURB & GUTTER
WITH ONE FULL SIDEWALK
(TYPE D)**



**STANDARD WHEELCHAIR RAMP CONSTRUCTION DETAIL FOR
STREETS WITH MONOLITHIC CURB
WITH ONE FULL SIDEWALK
(TYPE D)**



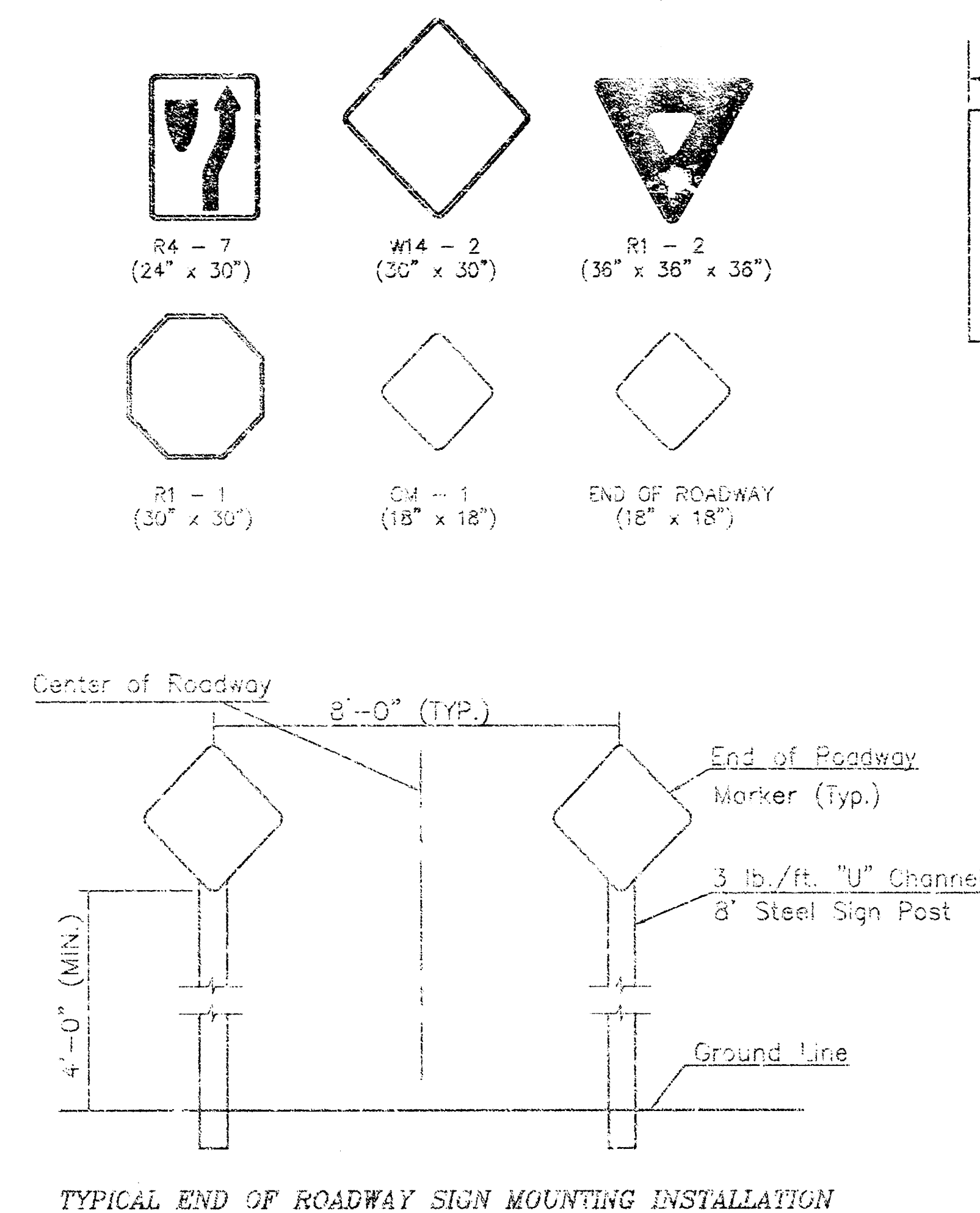
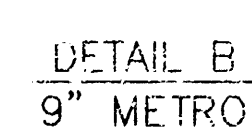
		WHEELCHAIR RAMP DETAILS	
		ACTING CITY ENGINEER JIM ARMOUR, P.E.	
PROJECT NUMBER 472-84051	DCK NUMBER 765868	DATE 08/04	
CITY ENGINEER'S OFFICE CITY HALL SEVENTH FLOOR 405 NORTH MAIN STREET WICHITA, KANSAS 67202-1220 (316) 268-4001 (316) 268-4114 FAX		DESIGN ABC	DRAWN DEF
SHEET 4 OF 12		MKEC REV. 5-18-03 REV. 11-03-03	

NOTE: REFERENCES BELOW TO "STANDARD SPECIFICATIONS" DENOTE "STANDARD SPECIFICATION FOR STATE ROAD AND BRIDGE CONSTRUCTION EDITION 1990" BY THE KANSAS DEPARTMENT OF TRANSPORTATION.

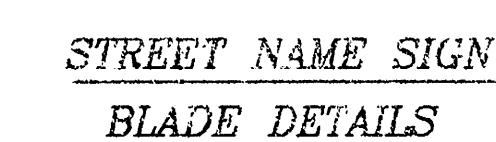
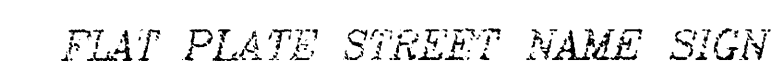
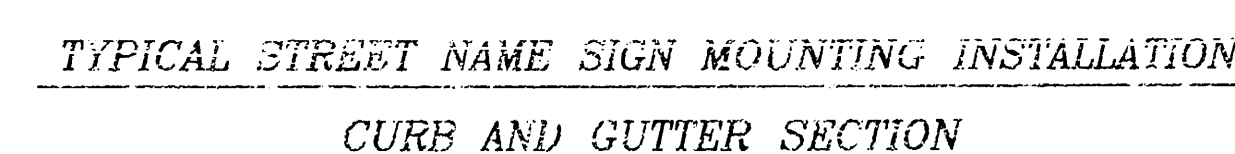
- G:\CIVIL\04071\DWG\PAV\04071ED5.DWG

SCALE: NONE	APPROVED BY	DATE: AUG. '04
DRAWN BY: TM		REVISED: OCT 2002

CITY OF WICHITA	
DEPARTMENT OF PUBLIC WORKS	
SCOTT LOGAN, TRAFFIC ENGINEER, ENGINEERING DIVISION	5 / 12 SHEET



TYPICAL END OF ROADWAY SIGN MOUNTING INSTALLATION



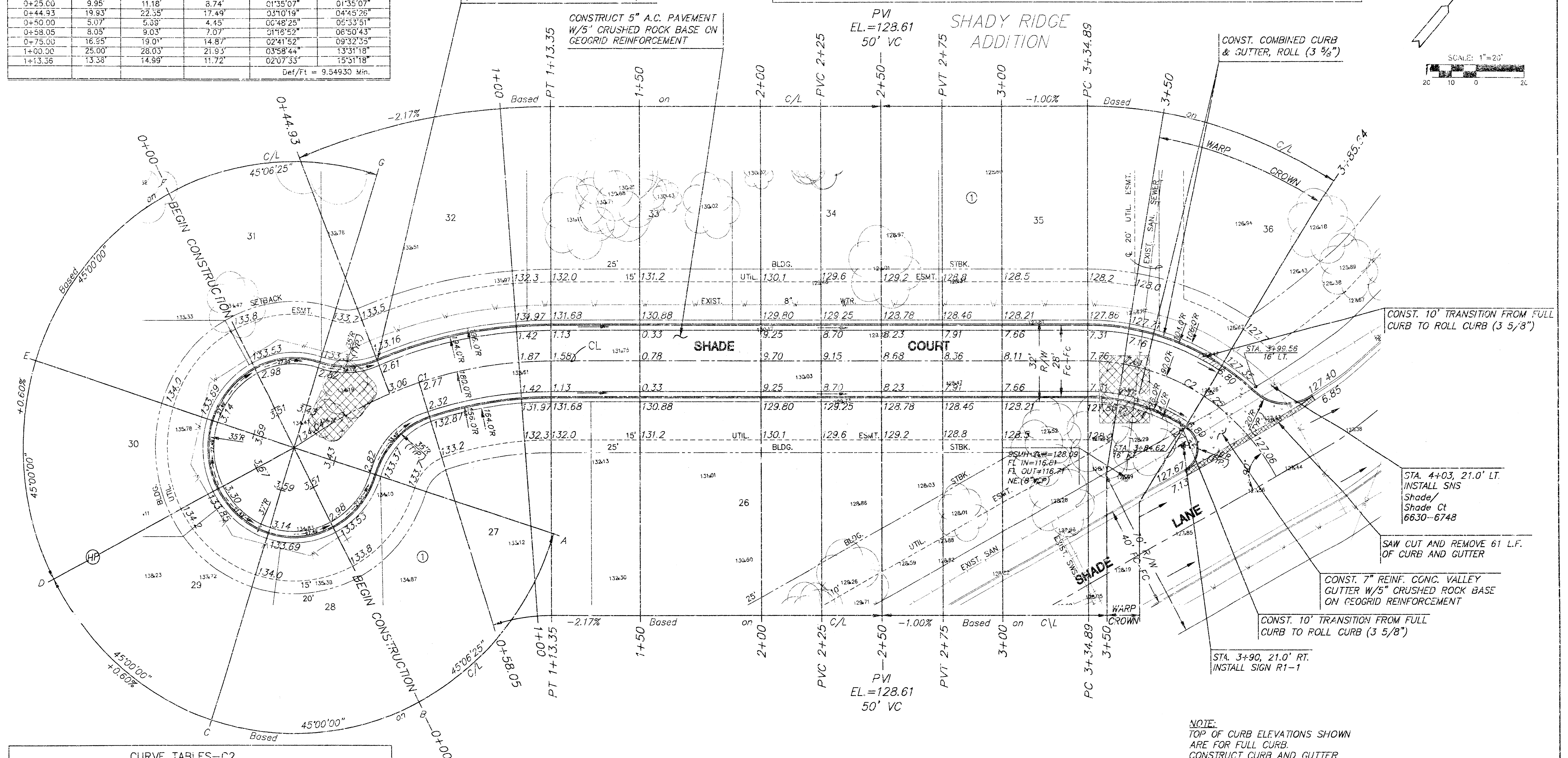
* FOR INFORMATION ONLY

STREET NAME	NO. BLADES REQ'D	
	6 3/4" STD.	8" METRO
Shade	1	
Shade Ct (6630-6748)		1

Revised from: Details> snsdts 4/13/99

CURVE TABLES-C1					
$\Delta = 31^{\circ}17'42''$ $R = 180.00'$ $T = 50.42'$ $L = 98.32'$ $LC = 97.10'$					
CURVE DATA BASED ON CENTERLINE $\Delta/2 = 15^{\circ}38'51''$					
STATION		CHORD LENGTH		DEFLECTION	TOTAL DEFLECTION
0+15.04				00'00"00"	00'00"00"
0+25.00	9.95'	11.18'	8.74'	01'35"07"	01'35"07"
0+44.93	19.93'	22.35'	17.49'	03'10"19"	04'45"26"
0+50.00	5.07'	5.38'	4.45'	00'48"25"	05'33"51"
0+58.05	8.05'	9.03'	7.07'	01'18"52"	06'50"43"
0+75.00	16.95'	19.01'	14.87'	02'41"52"	09'32"35"
1+00.00	25.00'	28.03'	21.93'	03'58"44"	13'31"18"
1+13.36	13.36'	14.89'	11.72'	02'07"35"	15'31"18"
Def/Ft = 9.54930 Min.					

SUBDIVISION BENCH MARKS			
NO.	STREET AND STATION	FROM CL	DESCRIPTION
1	SHADE CT. 0+44.93	14.5' LT.	NORTH END OF RETURN @ BALD END OF SHADE COURT
ELEVATIONS			
NOTE: CONTRACTOR SHALL INSTALL SUBDIVISION BENCH MARKS ("FLAT SURVEY MARKERS NO. 8134-08 3" TOP DIAMETER" PROVIDED BY KANSAS BLUE PRINT CO., INC.) COSTS TO BE CONSIDERED SUBSIDIARY TO CONSTRUCTION OF COMBINED CURB AND GUTTER.			



CURVE TABLES-C2					
$\Delta = 60^{\circ}20'13''$ $R = 90.00'$ $T = 52.31'$ $L = 94.78'$ $LC = 90.46'$					
CURVE DATA BASED ON CENTERLINE $\Delta/2 = 30^{\circ}10'06''$					
STATION		CHORD LENGTH		DEFLECTION	TOTAL DEFLECTION
3+34.89				00'00"00"	00'00"00"
3+50.00	15.11'	18.78'	11.40'	04'48"35"	04'48"35"
3+75.00	25.00'	31.01'	18.83'	07'57"28"	12'46"03"
3+85.64	10.64'	13.33'	8.03'	03'23"13"	16'09"19"
4+00.00	14.36'	17.85'	10.64'	04'34"15"	20'43"31"
4+11.52	11.52'	14.33'	8.70'	03'40"01"	24'23"32"
4+25.00	13.48'	16.76'	10.18'	04'34"15"	28'40"58"
4+29.67	4.67'	5.81'	3.53'	01'29"08"	30'10"06"
Def/Ft = 19.09859 Min.					

LEGEND

STREET SIGN & SIGN LOCATION
(SEE SIGN ASSEMBLY TABLE
FOR TYPE & STATION OF SIGN)

TREE REMOVAL

REINFORCED CONCRETE PAVEMENT

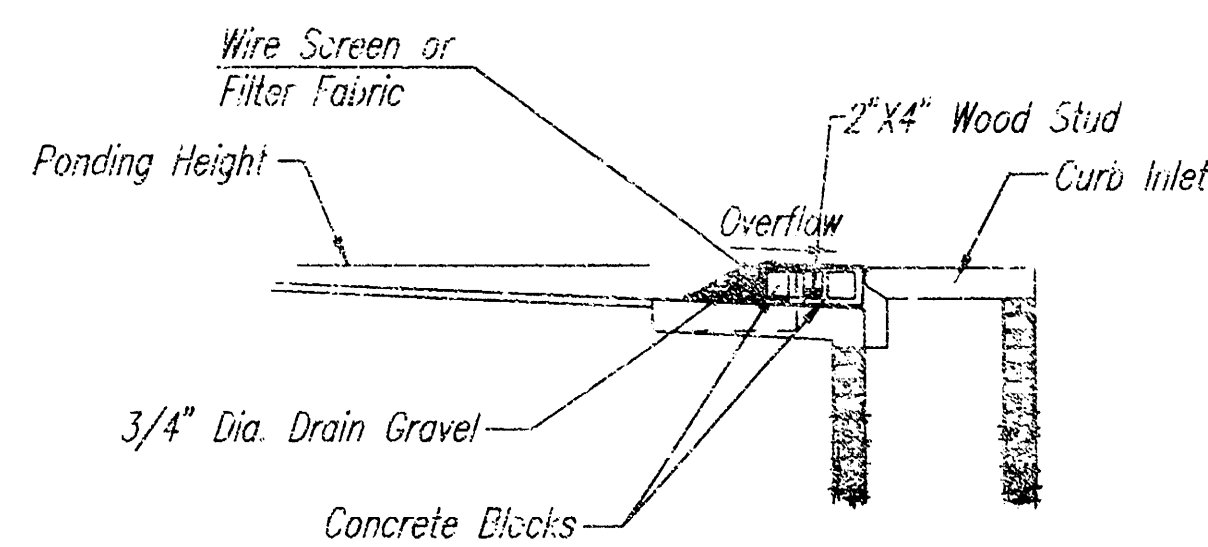
MKEC
ENGINEERING
CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
- 10 - 684 - 9600

SHADY RIDGE ADDITION- PHASE I
PROJECT NAME

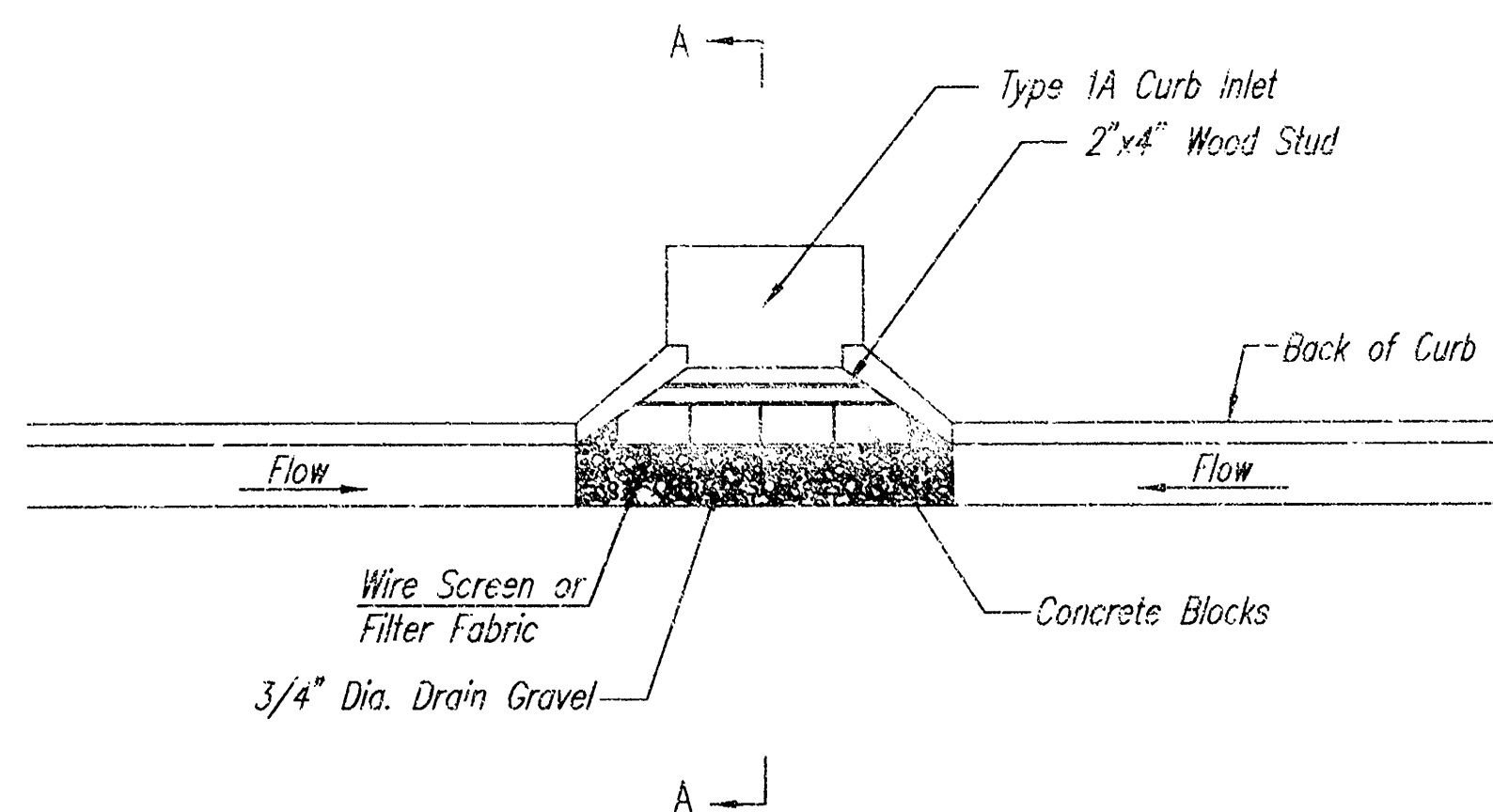
PAVING PLANS
SHEET TITLE

DESIGN BY: SJS DRAWN BY: KWS CHECKED BY: GJA

DATE: AUGUST 2004 JOB NO.: 04071 SHEET/OF: 6 / 12



SECTION A-A



CURB INLET GRAVEL FILTERS (INLET PROTECTION-RESIDENTIAL STREETS ONLY)

NOTE: Other types of curb inlet protection may be approved by the city so long as equal protection is provided.

A gravel inlet filter shall be installed at sump locations on residential streets. This type of protection is not to be used on arterial or collector streets at any time that it would pose an undue traffic hazard.

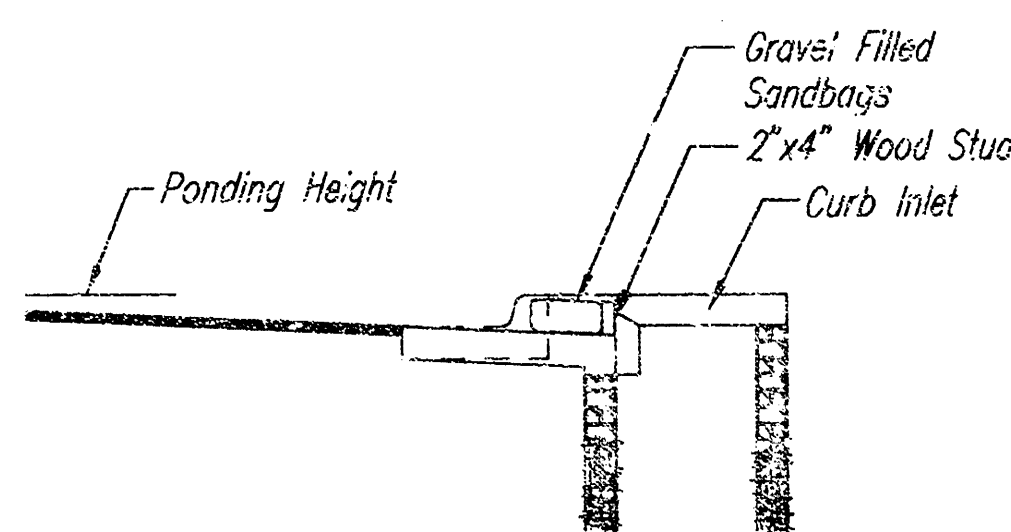
Instructions for Installing:

- STEP 1: Place concrete blocks around the inlet as shown on drawing. Insert 2x4 board as shown.
- STEP 2: Wrap 1/2" mesh wire screen around the concrete blocks.
- STEP 3: Place 1" to 1-1/2" diameter rock around the blocks and wire screen. Be sure the rock extends down from the top of the concrete block.
- STEP 4: To prevent damage to vehicles, signs warning drivers about the structures may be necessary. An alternative installation is the use of gravel bags supported by a 2x4" board to prevent collapsing.

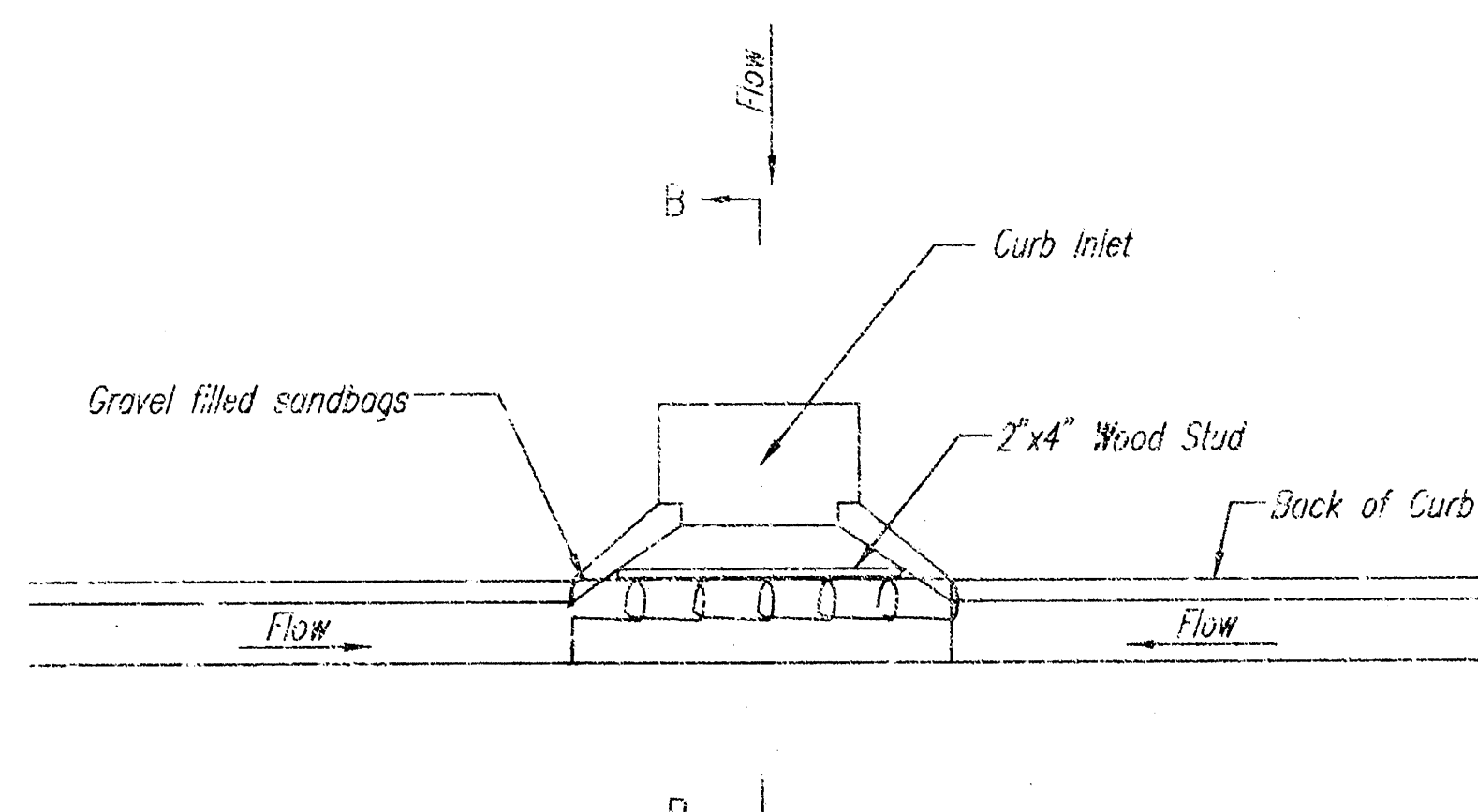
Use of rock with diameters smaller than 1" in the bag may result in clogging of pores and reduce the amount of water flowing into an inlet.

Maintenance:

All curb inlet gravel filters shall be inspected and repaired after each runoff event. Sediment deposits are to be removed once material is within 8 cm (3 inches) of the top of any block. Periodically, the gravel shall be raked to increase infiltration and filtering of runoff waters. Accumulated sediment is to be removed immediately from roads and streets.

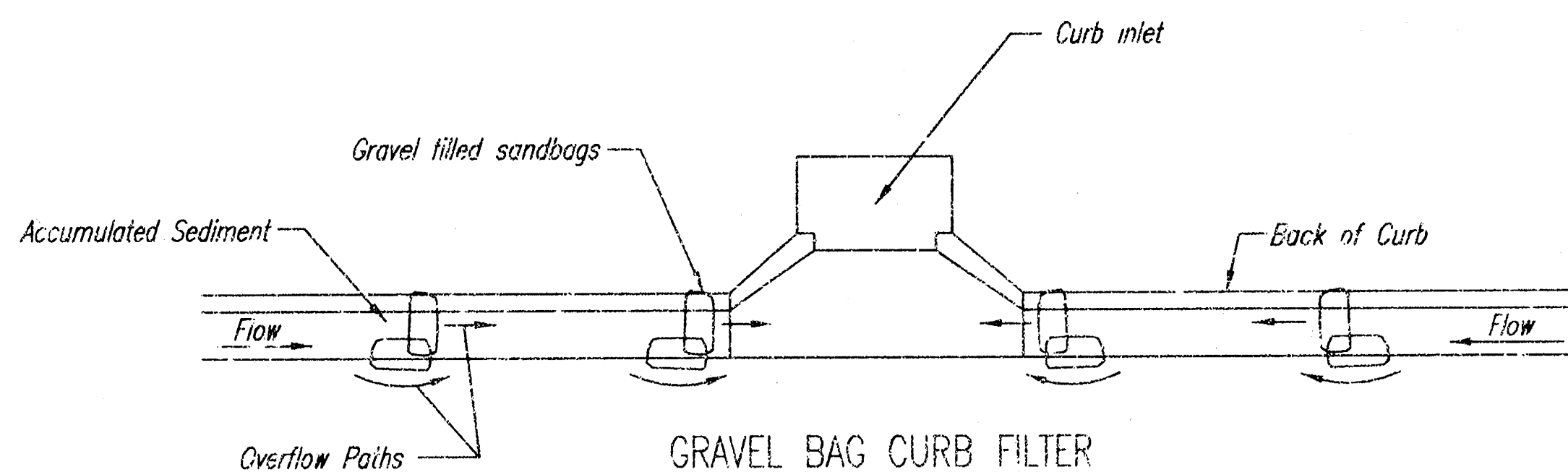


SECTION B-B



CURB INLET SANDBAG FILTERS (INLET PROTECTION)

NOTE: Other types of curb inlet protection may be approved by the City so long as equal protection is provided.



NOTE: Place two or more sets of bags in a manner that results in maximum support. The flow line bag must be lower than top of curb.

CURB SEDIMENT TRAPS

When inlets are located on streets having a grade (i.e., sump conditions do not exist), installing gravel (or sand) bags in the gutter flow line to create small sediment traps can be considered. Gravel bags are recommended over sand bags to allow for drainage.

If the spacing between bags becomes too large, little sediment may be trapped. Spacing of bags should be completed using the table or graph that illustrates placement distances based upon street slope. When installed in the gutter, bag tops must be lower than the sidewalk.

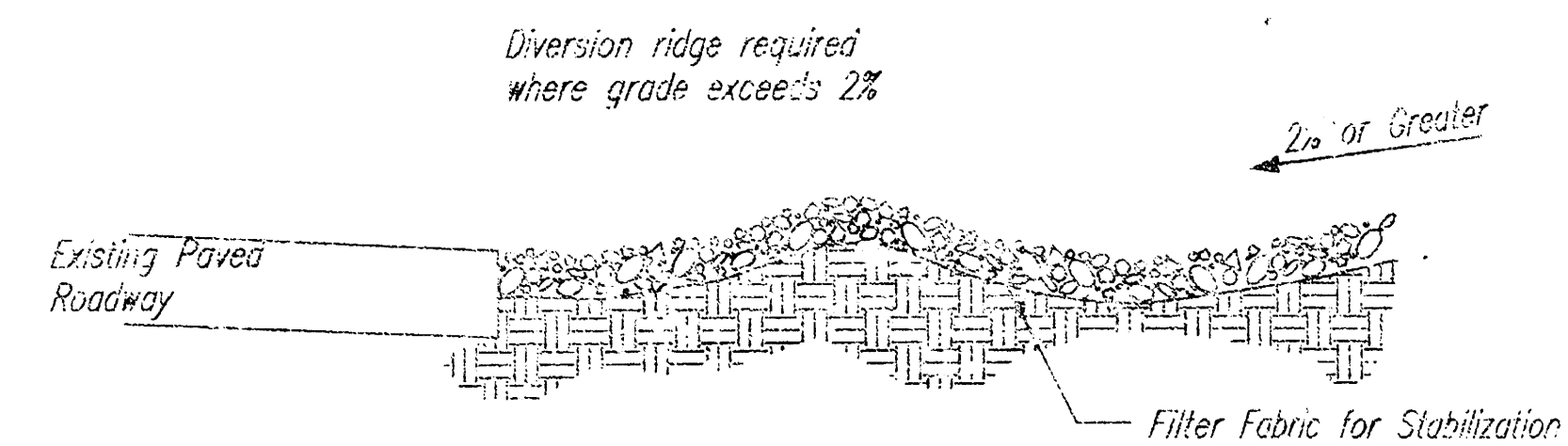
Spacing:

Gravel bags are to be placed according to street grades using the following table or graph that appears below.

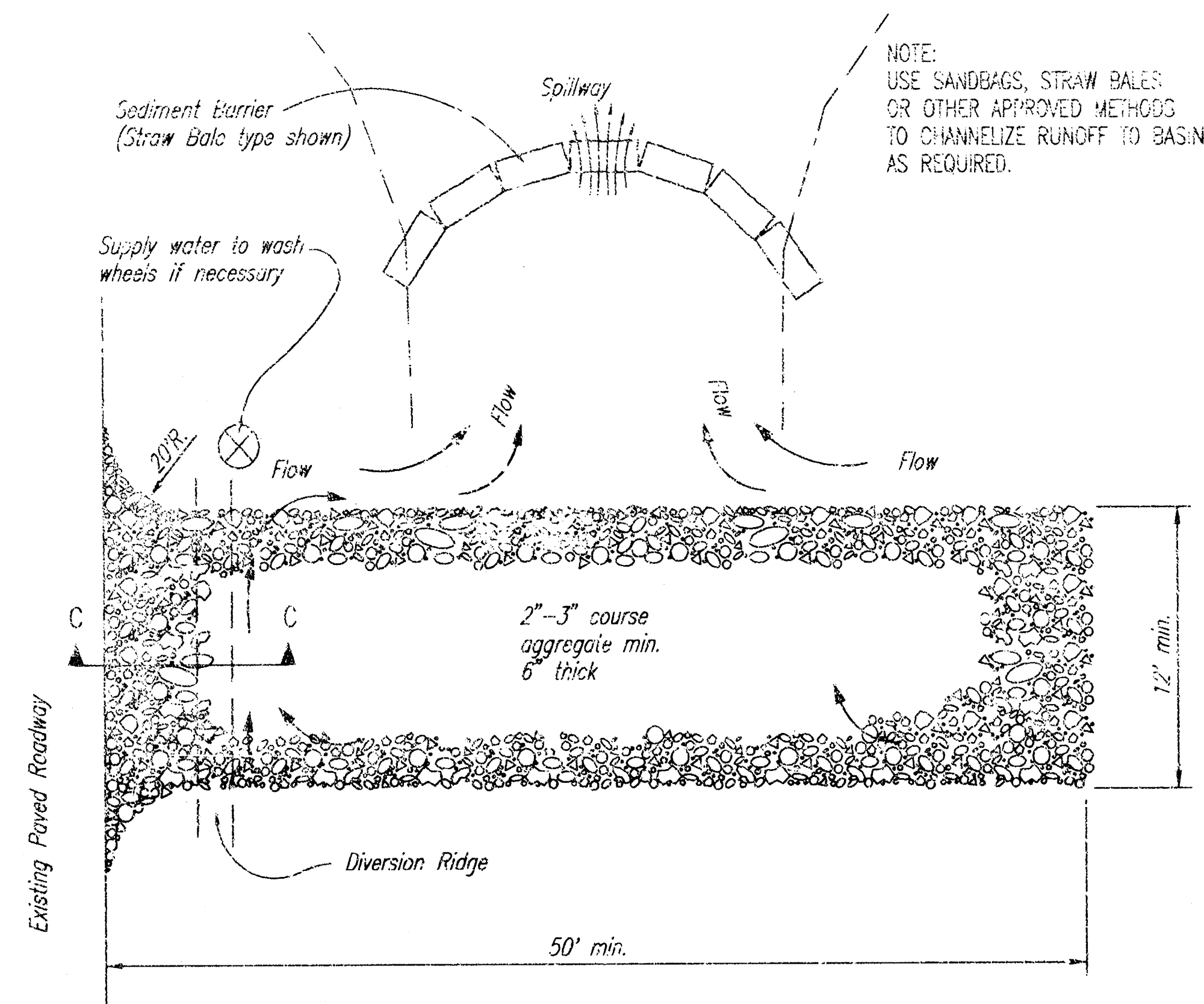
GRADE (%)	SPACING (FEET)
0.5	75
1.0	45
2.0	18
3.0	12
4.0	9
5.0	6

Maintenance:

Collected sediment shall be removed after every runoff event. Bags that are destroyed by vehicular traffic or through natural deterioration are to be immediately replaced.



SECTION C-C



NOTES:

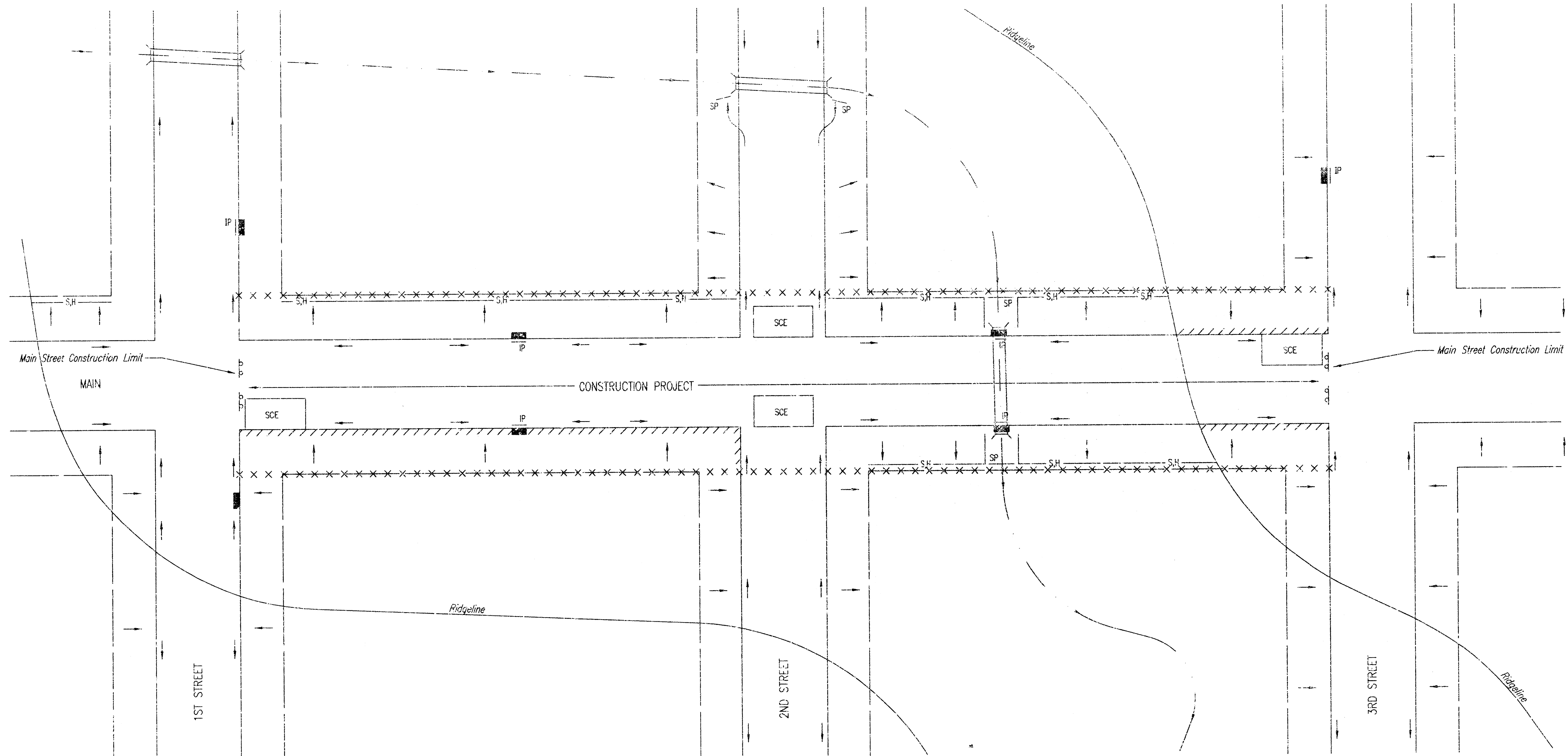
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

	SOIL EROSION BMP DETAILS	
	CHRISTOPHER M. CARRIER, P.E. STORM WATER ENGINEER	
	PROJECT NUMBER 472-84051	DATA NO. 765888
	DATE AUG 04	SHEET 7 OF 12

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 DO 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 NPDES STORMWATER 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 SHOWN IN THE POLLUTION PREVENTION PLAN.

4. FOR PROJECTS DISTURBING LESS THAN 5 ACRES, CONTRACTORS ARE ENCOURAGED TO PREPARE STORMWATER POLLUTION PREVENTION PLANS PRIOR TO CONSTRUCTION.
5. FAILURE TO USE AND MAINTAIN BMP'S IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE CONTRACTOR TO THE PENALTIES PROVIDED FOR THEREIN.
6. THE APPLICATION OF BMP'S SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT BMP OTHER THAN THOSE SHOWN. BMP'S, OTHER THAN THOSE SHOWN, MAY BE UTILIZED AS LONG AS THEY ARE EFFECTIVE AND MAINTAINED.

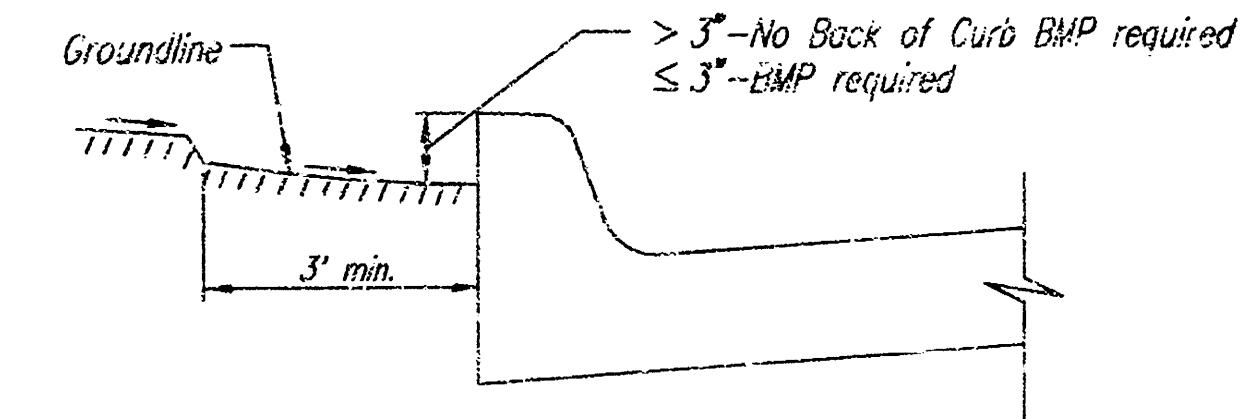


LEGEND

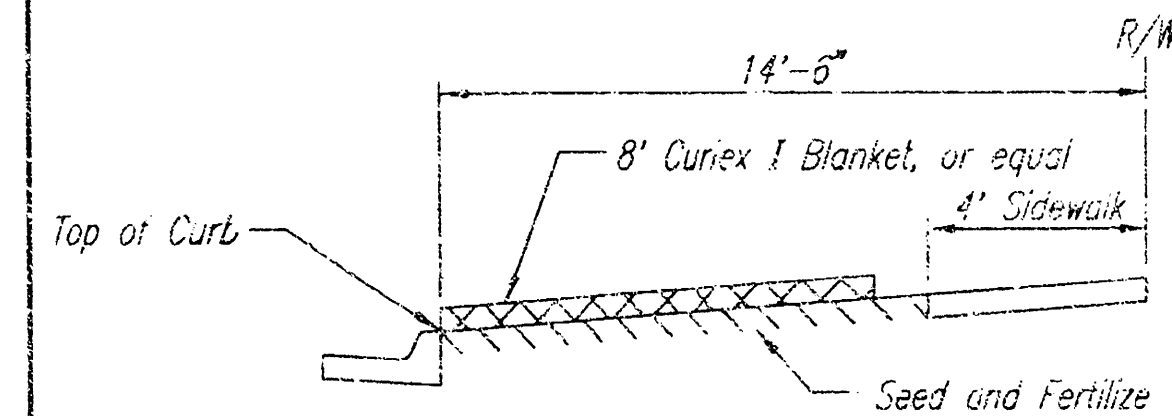
- R-O-W LIMITS
- DRAINAGE FLOW PATH
- x x x x x R/W LIMIT WITHIN CONSTRUCTION LIMIT
- STORM WATER INLETS
- IP INLET PROTECTION
- SH— SILT FENCE OR HAYBALE BMP
- SP— STREAM PROTECTION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- //// BACK OF CURB PROTECTION

NOTES:

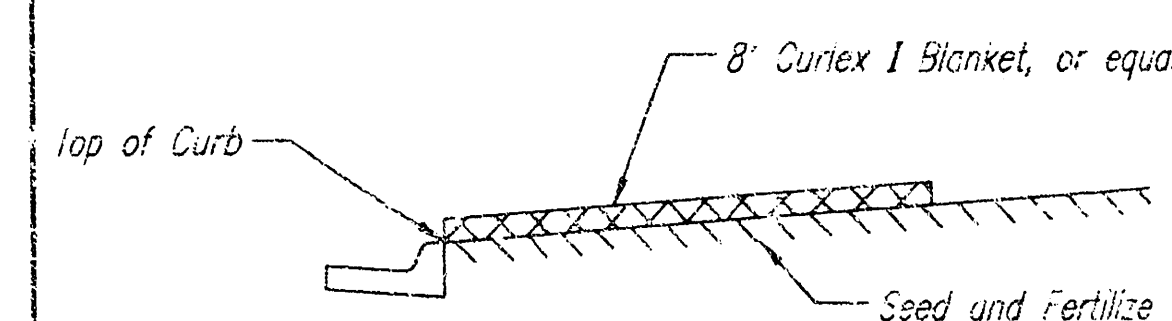
1. GENERAL BMP GOAL IS TO KEEP ALL SEDIMENT CONFINED TO THE CONSTRUCTION SITE, AND OUT OF ALL UNDERGROUND PIPES, DITCHES, AND OTHER DRAINAGE FACILITIES.
2. THE POINT OF COMPLIANCE IS GENERALLY THE RIGHT-OF-WAY LINES WITHIN THE LIMITS OF CONSTRUCTION.
3. BMP'S WILL BE REQUIRED AT ALL POINTS ALONG THE PROJECT WHERE DISTURBED EARTH CAN DRAIN ONTO PRIVATE PROPERTY.
4. INLET PROTECTION DEVICES WILL BE REQUIRED WHEREVER WATER CAN DRAIN OFF THE PROJECT SITE INTO AN INLET, INCLUDING ANY SIDE STREET INLETS.
5. BMP'S SHALL BE INSTALLED AT CREEK CROSSINGS SO AS TO PREVENT SEDIMENT FROM ENTERING THEREIN.
6. STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED, AS NEEDED, TO PREVENT MUD FROM TRACKING ONTO STREETS NOT UNDER CONSTRUCTION AND ON STREETS WITHIN THE PROJECT LIMITS IF TRAFFIC IS BEING MAINTAINED THROUGH THE PROJECT.
7. ANY MUD TRACKED ONTO STREETS MUST BE REMOVED AT THE END OF EACH WORK DAY.
8. THE CONTRACTOR WILL BE REQUIRED TO PLACE BMP'S BACK OF CURB, WHENEVER WATER CAN DRAIN OVER CURB, TO KEEP ERODED SOIL OUT OF THE GUTTERLINES, IN ACCORDANCE WITH THE FOLLOWING:
 - A. THE BMP REQUIRED WILL BE CURLEX I EXCELSIOR BLANKET, OR EQUAL. SAID BLANKET SHALL BE PLACED OVER THE APPROPRIATE SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS. (SEE BACK OF CURB PROTECTION DETAIL)
 - B. THIS BMP SHALL BE INSTALLED IMMEDIATELY WHENEVER THE CURB IS BACKFILLED TO WITHIN 3" OF THE TOP OF CURB. (SEE CURB BACKFILL DETAIL)
 - C. ADDITIONALLY, OTHER BMP'S (HAYBALES, SILT FENCE, ETC.) WILL BE INSTALLED AT LOCATIONS OF CONCENTRATED FLOW RESULTING IN SEDIMENT OVERRUNNING THE MAT.
 - D. SHOULD THE PROJECT PLANS SPECIFY THAT THE RIGHT-OF-WAY IS TO BE SODED, THE EXCELSIOR MAT WILL NOT BE REQUIRED SO LONG AS THE SOD IS PLACED WITHIN 48 HOURS AFTER CURB BACKFILL REACHES A HEIGHT OF 3" OR LESS FROM TOP OF CURB. (SEE DETAIL)



CURB BACKFILL DETAIL

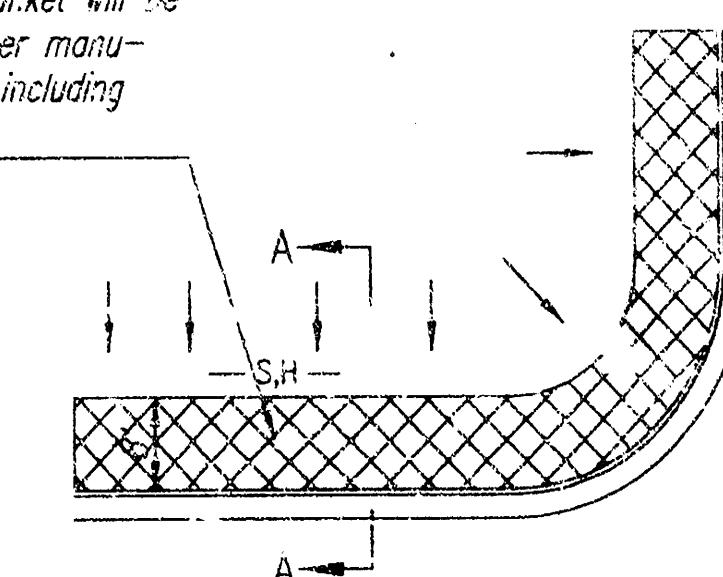


SECTION B-B

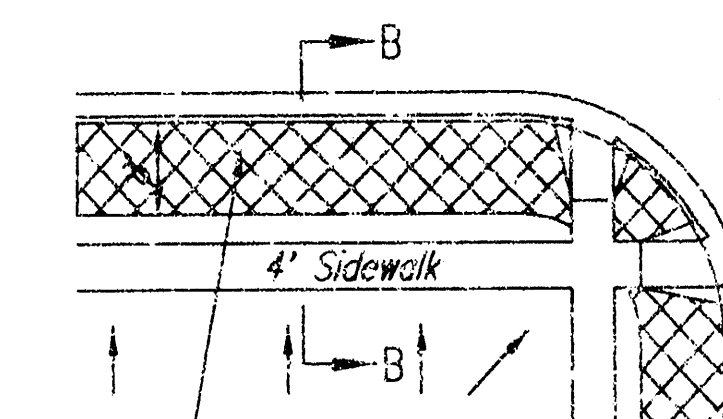


SECTION A-A

BMP-Install 8' wide Curlex I Excelsior Blanket, or equal, on prepared surface back of curb. Edge of blanket will be at back of curb. Install per manufacturer's recommendation, including staples.



SOUTH STREET

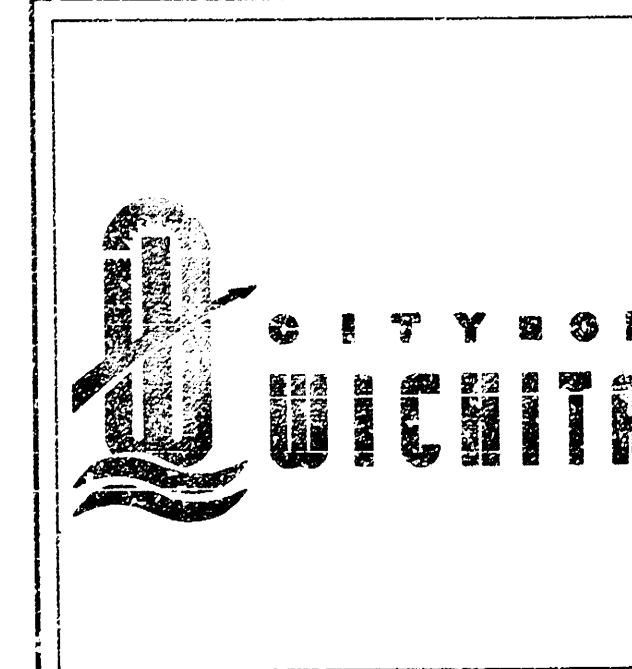


BMP-Install 8' wide Curlex I Excelsior Blanket, or equal, on prepared surface back of curb. Edge of blanket will be at back of curb. Install per manufacturer's recommendation, including staples.

BACK OF CURB PROTECTION DETAIL

NOTES:

1. EXCELSIOR MAT TO BE INSTALLED WHEN SOD IS NOT SPECIFIED ON PROJECT.
2. EXCELSIOR BLANKET TO BE INSTALLED OVER SEED AND FERTILIZER, AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
3. AFTER INSTALLATION OF EXCELSIOR 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.



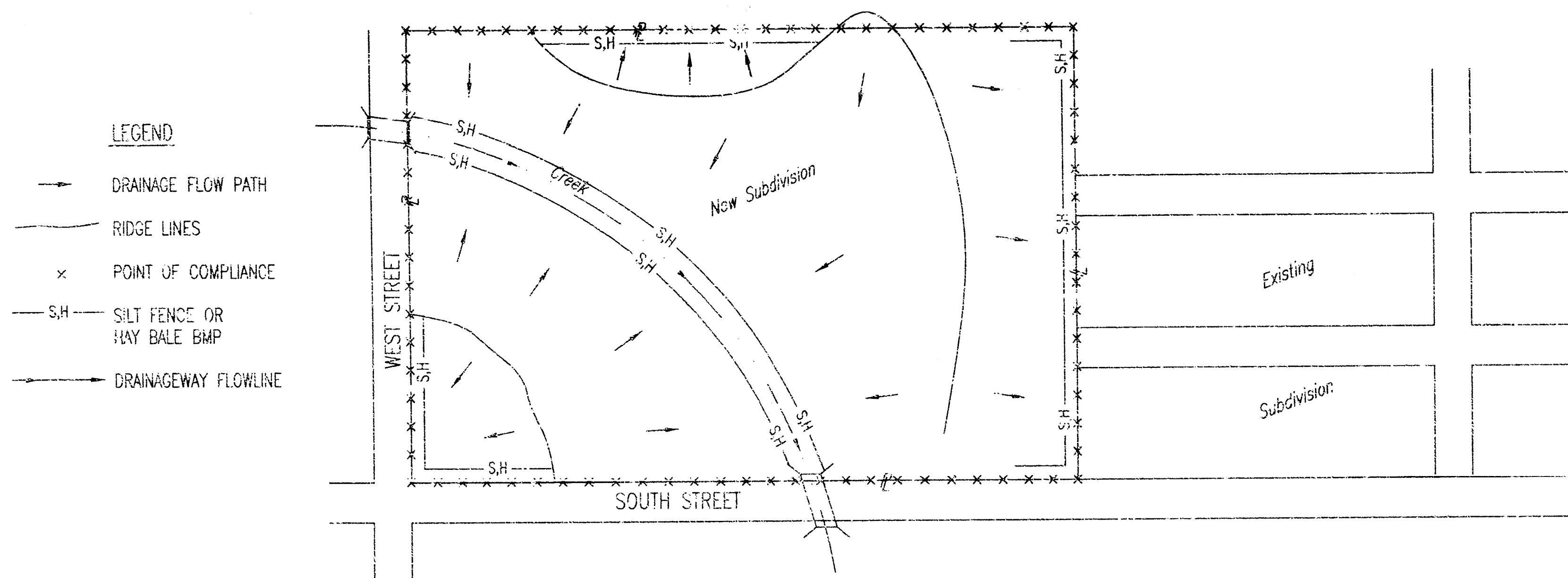
SOIL EROSION BMP'S
STREET
IMPROVEMENT
PROJECTS

CHRISTOPHER H. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER 472-84051 GCA NO. 765888

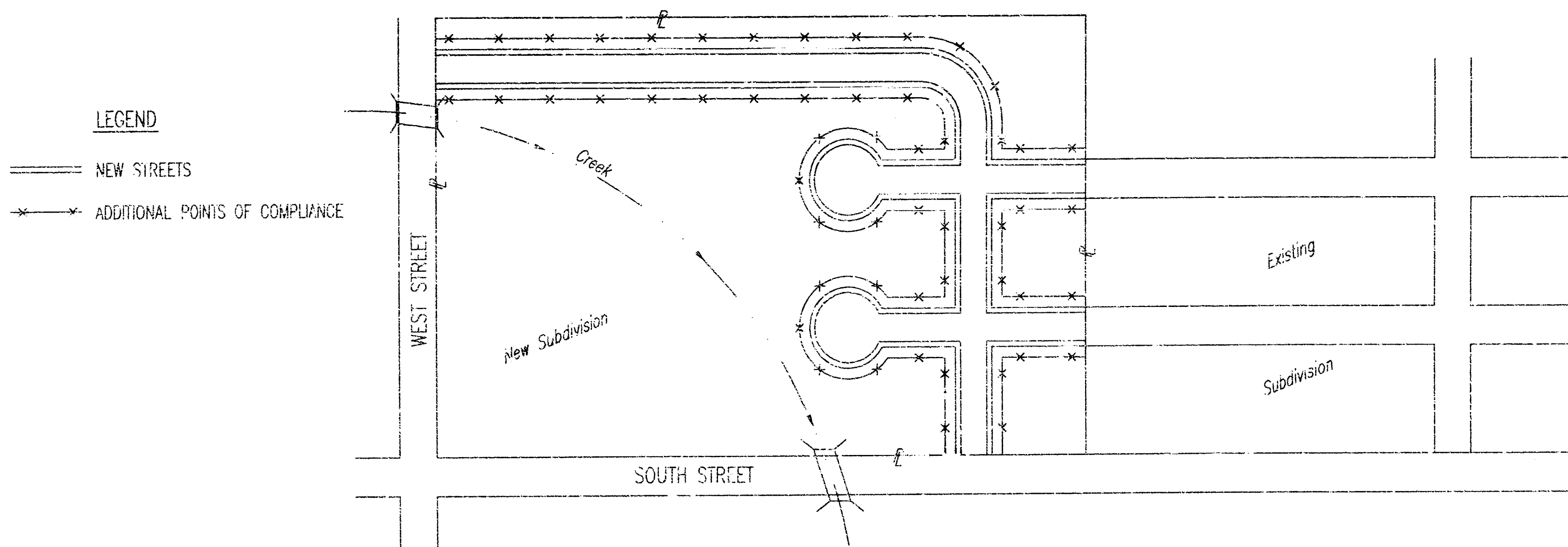
DATE AUG 04 SHEET 8 OF 12

PHASE 1 -- INITIAL EARTHWORK AND UTILITIES (EXCEPT STORM SEWER)



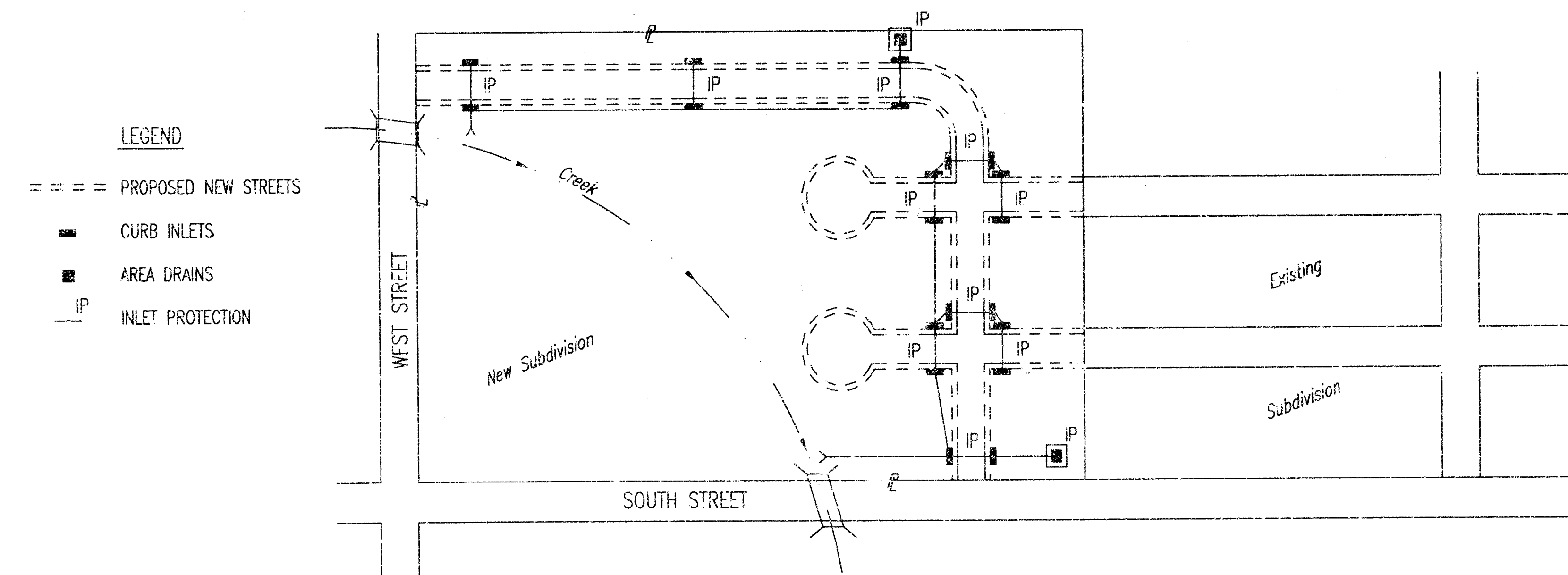
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, THE POINTS OF COMPLIANCE ARE THE PERIMETER BOUNDARIES AND ANY DRAINAGE WAYS OR STORM SEWERS DRAINING THROUGH OR FROM THE SITE. SHOULD LAKES BE CONSTRUCTED WITHIN THE SUBDIVISION THAT WILL DISCHARGE DURING STORMS, THEY ARE ALSO A POINT OF COMPLIANCE.
2. HAYBALES OR SILT FENCE MUST BE CONSTRUCTED ALONG THE PROPERTY LINE WHERE ON SITE WATER CAN DRAIN OFF THE PROPERTY. THESE BMP'S WILL ALSO BE INSTALLED ALONG ANY DRAINAGE DITCH OR LAKE THAT CAN DISCHARGE.
3. SHOULD SILT OR SEDIMENT ENTER THE DITCHES OR GUTTERLINES ON THE ADJACENT BOUNDARY STREETS, APPROPRIATE BMP'S WILL BE PLACED WITHIN THE SUBDIVISION TO PREVENT THIS.
4. ANY MUD TRACKED ONTO ADJACENT STREETS WILL BE REMOVED AT THE END OF EACH WORK DAY.
5. CONTRACTORS WORKING WITHIN THE SITE WILL NOT BE REQUIRED TO USE INDIVIDUAL BMP'S AS LONG AS THOSE SPECIFIED ABOVE ARE IN PLACE AND EFFECTIVE. CONTRACTORS WORKING ON THE BOUNDARY LINE STREETS OR ON ADJACENT PROPERTIES TO EXTEND UTILITIES ARE EXPECTED TO USE BMP'S AT THEIR WORK LOCATIONS, AS NEEDED.
6. UTILIZE STABILIZED CONSTRUCTION ENTRANCE AT ENTRANCE AND EXIT ONTO ANY EXISTING PUBLIC STREETS.
7. THE SUBDIVISION DEVELOPER (OWNER) SHALL INSTALL AND MAINTAIN THE ON-SITE BMP'S.

PHASE 3 -- STREET CONSTRUCTION



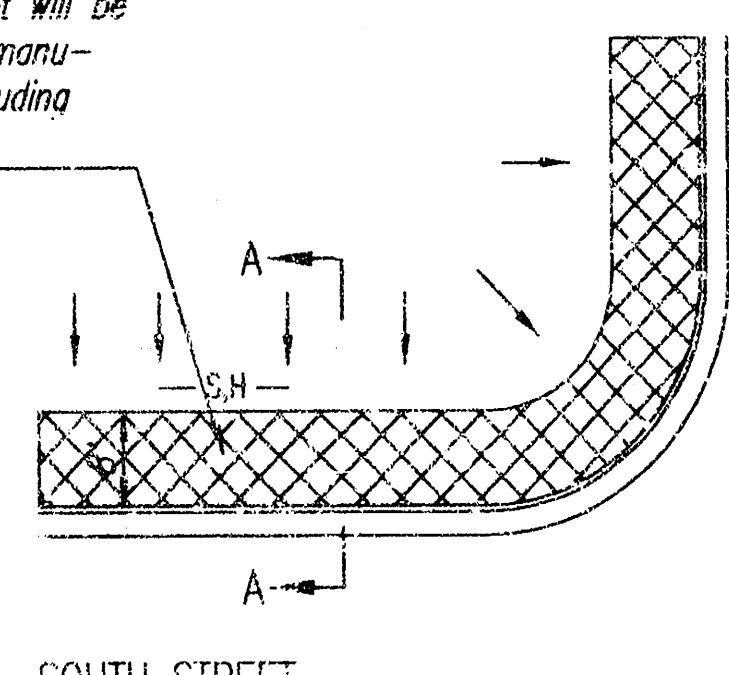
1. DURING THIS PHASE OF SUBDIVISION CONSTRUCTION, NEW STREETS ARE INSTALLED. ALL BMP'S INSTALLED DURING PHASE 1 AND 2 MUST STILL BE MAINTAINED. THE POINT OF COMPLIANCE NOW SHIFTS TO THE BACK OF CURB ALONG EACH STREET.
2. CURB OPENING INLET PROTECTION:
A. SUMP AREAS -- INLET PROTECTION SHALL BE PROVIDED WHEN STREET SUBGRADE WORK IS COMPLETED.
B. NON-SUMP LOCATIONS -- PROVIDE INLET PROTECTION AS SOON AS BASE COURSE ASPHALT IS INSTALLED, BEFORE THE SURFACE COURSE LIFT.
3. BMP'S WILL BE REQUIRED BACK OF CURB WHEREVER WATER CAN FLOW OVER THE CURB AND THE CURB HAS BEEN BACKFILLED TO WITHIN 3" OR LESS OF THE TOP OF CURB (SEE CURB BACKFILL DETAIL). FOR CURBS NOT YET ENTIRELY BACKFILLED (3" OR MORE SLOW TOP OF CURB), BMP'S WILL BE REQUIRED AT POINTS WHERE WATER BREAKS OVER CURB WHICH COULD RESULT IN THE PLACEMENT OF SEDIMENT IN THE GUTTER.
4. SEE DETAIL THIS SHEET ON BACK OF CURB PROTECTION.
5. THE BACK OF CURB PROTECTION SPECIFIED ON THIS PLAN MAY HAVE TO BE SUPPLEMENTED WITH HAYBALE OR SILT FENCE BMP'S AT LOCATIONS WHERE CONCENTRATED FLOW RESULTS IN SEDIMENT BEING CARRIED OVER THE EXCELSIOR MATS.
6. THE STREET CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING BACK OF CURB BMP'S.
7. THE INDIVIDUAL LOT OWNERS WILL BE RESPONSIBLE FOR MAINTAINING THE BACK OF CURB BMP'S IN FRONT OF THEIR LOTS UNTIL SUCH TIME AS ADJACENT DISTURBED EARTH IS STABILIZED WITH GRASS OR SOD.

PHASE 2 -- INSTALLATION OF STORM SEWER

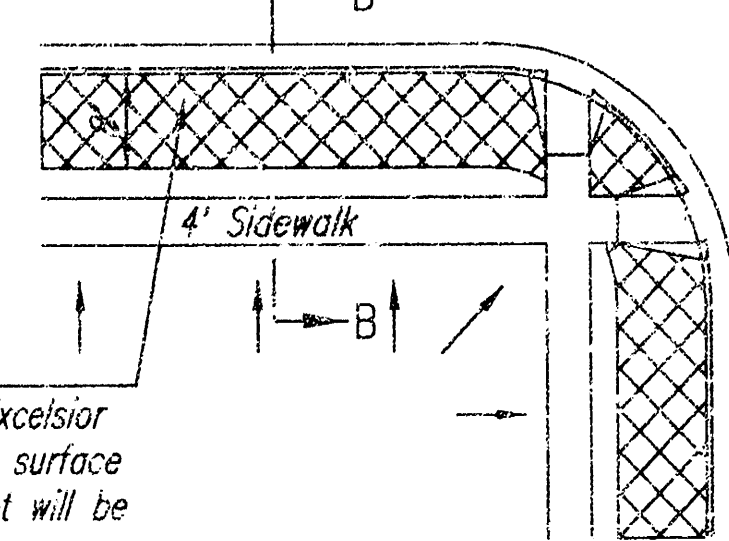


1. DURING THIS PHASE OF SUBDIVISION DEVELOPMENT, ALL BMP'S REQUIRED IN PHASE 1 SHALL REMAIN IN PLACE AND BE MAINTAINED.
2. AS NEW STORM SEWERS, WITH INLETS, ARE INSTALLED, THE STORM SEWERS MUST NOW BE PROTECTED SO ALL NEW INLETS BECOME POINTS OF COMPLIANCE.
3. AREA DRAINS -- AS SOON AS WATER CAN FLOW INTO THESE DRAINS, HAYBALE OR SILT FENCE PROTECTION WILL BE INSTALLED AROUND THEM.
4. CURB OPENING INLETS -- AS SOON AS WATER CAN FLOW INTO THESE DRAINS, INLET PROTECTION BMP'S MUST BE INSTALLED. SEE PHASE 3 -- STREET CONSTRUCTION.
5. THE STORM SEWER CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLING THESE BMP'S. IF WATER CANNOT FLOW INTO CURB INLETS UNTIL STREET CONSTRUCTION IS COMPLETE, THEN STREET CONTRACTOR WILL INSTALL INLET PROTECTION.
6. THE SUBDIVISION DEVELOPER WILL MAINTAIN THESE BMP'S ONCE INSTALLED.
7. ONCE ALL DISTURBED GROUND DRAINING TO AN INLET HAS BEEN RESTABILIZED WITH GRASS OR SOD, THE SUBDIVISION DEVELOPER WILL BE RESPONSIBLE FOR PERMANENTLY REMOVING THE INLET PROTECTION.

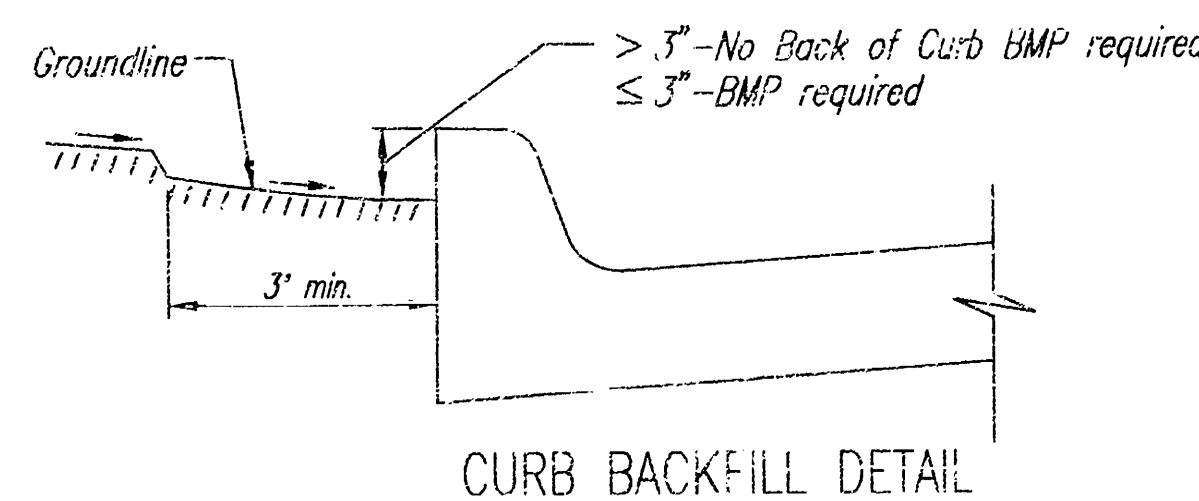
BMP--Install 8" wide Curlex I Excelsior Blanket, or equal, on prepared surface back of curb. Edge of blanket will be at back of curb. Install per manufacturer's recommendation, including staples.



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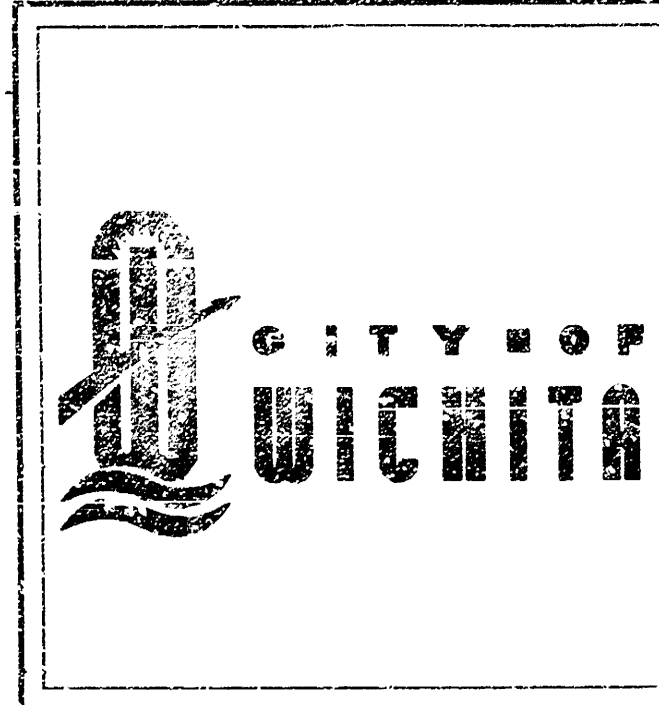


BACK OF CURB PROTECTION DETAIL



GENERAL NOTES:

1. THE INTENT OF ALL BEST MANAGEMENT PRACTICES (B.M.P.'S) IS TO PREVENT ERODED SOIL FROM ENTERING DITCHES, STORM SEWERS, OR ANY OTHER DRAINAGE FEATURE.
2. THIS SHEET IS INTENDED TO PROVIDE GUIDELINES AS TO WHAT TYPE OF BMP'S WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS. CONTRACTORS ARE EXPECTED TO BID PROJECTS ACCORDINGLY.
3. BMP'S SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS TO REMAIN EFFECTIVE. MAINTENANCE SHALL BE AS INDICATED ON THE BMP DETAIL SHEETS.
4. PERSONS DESTROYING BMP'S SHALL BE RESPONSIBLE FOR IMMEDIATELY REPAIRING THEM OR INSTALLING SUITABLE REPLACEMENT BMP'S.
5. THE DEVELOPMENT OF ANY SUBDIVISION THAT DISTURBS 5 ACRES OR MORE WILL REQUIRE A FEDERAL/STATE NPDES STORMWATER PERMIT. THE PREPARATION OF A STORMWATER POLLUTION PREVENTION PLAN IS REQUIRED. EROSION CONTROL BMP'S ARE REQUIRED. THE DETAILS SHOWN ON THIS SHEET ARE THE MINIMUM STANDARDS TO BE SHOWN ON POLLUTION PREVENTION PLAN.
6. FOR SUBDIVISIONS SMALLER THAN 5 ACRES, SOIL EROSION BMP'S ARE REQUIRED. ALSO, DEVELOPERS AND CONTRACTORS ARE ENCOURAGED TO DEVELOP POLLUTION PREVENTION PLANS FOR EACH PROJECT PRIOR TO CONSTRUCTION.
7. FAILURE TO USE AND MAINTAIN BMP'S IS A VIOLATION OF SECTION 16.32 OF THE CITY CODE AND WILL SUBJECT THE SUBDIVISION DEVELOPER AND CONTRACTORS TO THE PENALTIES PROVIDED THEREIN.
8. THE APPLICATION OF BMP'S SHOWN ON THIS SHEET IS FOR SITUATIONS NORMALLY ENCOUNTERED. FROM TIME TO TIME, SITUATIONS WILL ARISE THAT MAY REQUIRE A DIFFERENT BMP OTHER THAN THAT SHOWN. BMP'S, OTHER THAN THOSE SHOWN, MAY BE UTILIZED SO LONG AS THEY ARE EFFECTIVE AND MAINTAINED.
9. A STABILIZED EARTH SURFACE IS DEFINED AS ONE THAT IS HARD SURFACED WITH CONCRETE, ASPHALT, OR THE LIKE, OR ONE ON WHICH 70% OF THE GRASS HAS GERMINATED ON THE ENTIRE SURFACE.



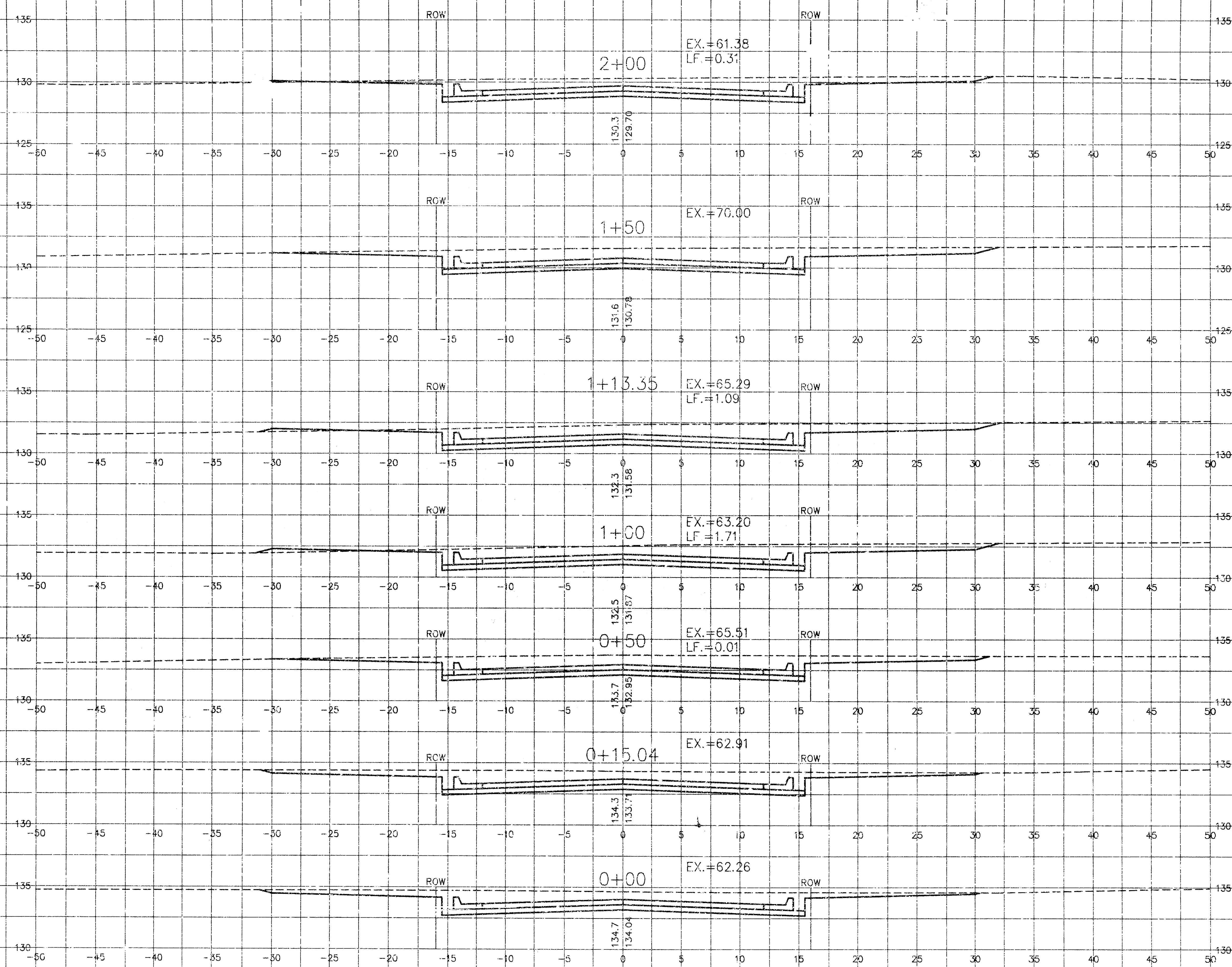
SOIL EROSION BMP'S SUBDIVISION DEVELOPMENT PROCESS

CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER 472-84051 OCA NO. 765888

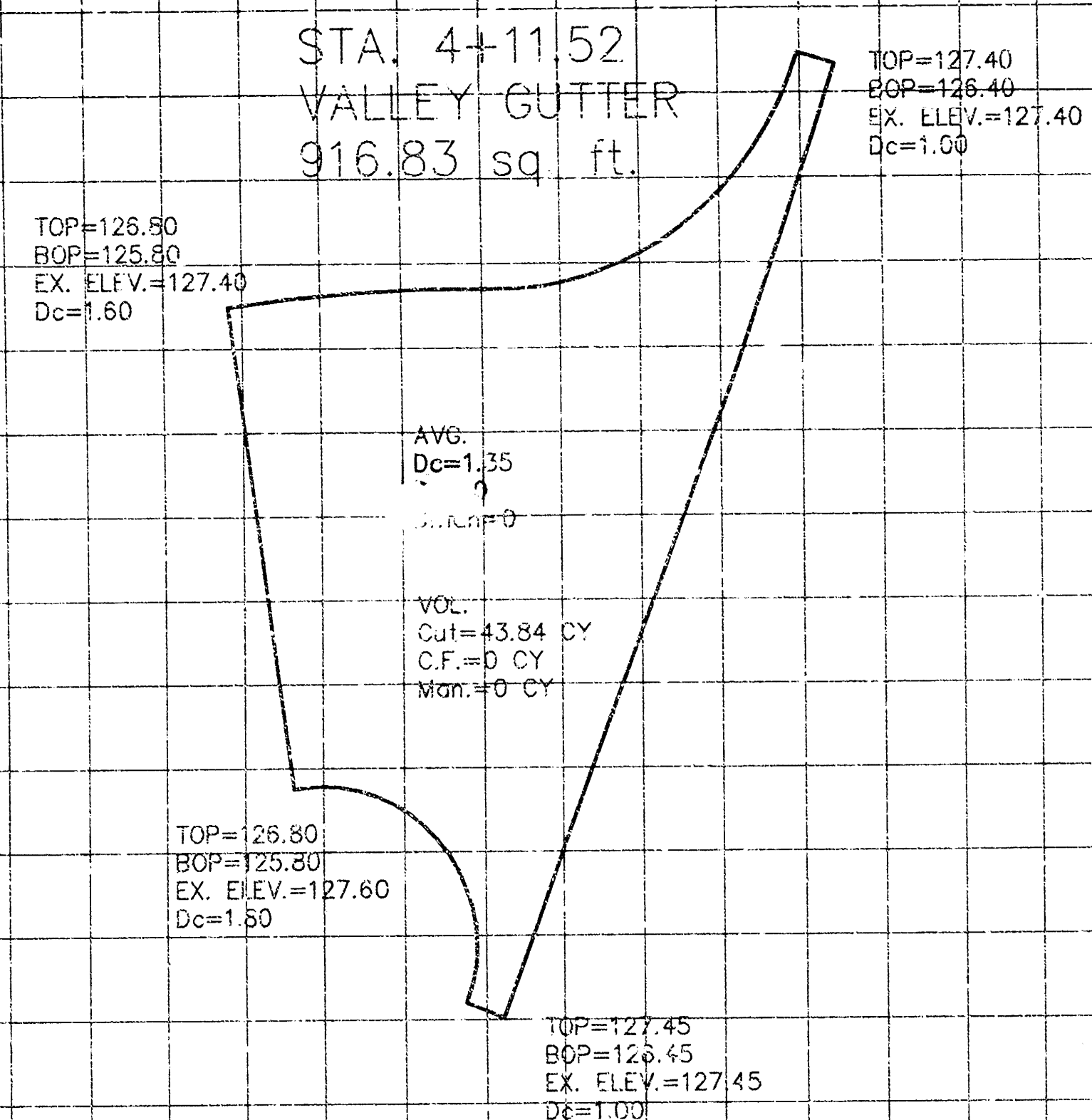
DATE AUG 04 SHEET 9 OF 12

SHADY RIDGE ADDITION
SHADE COURT
CROSS SECTIONS

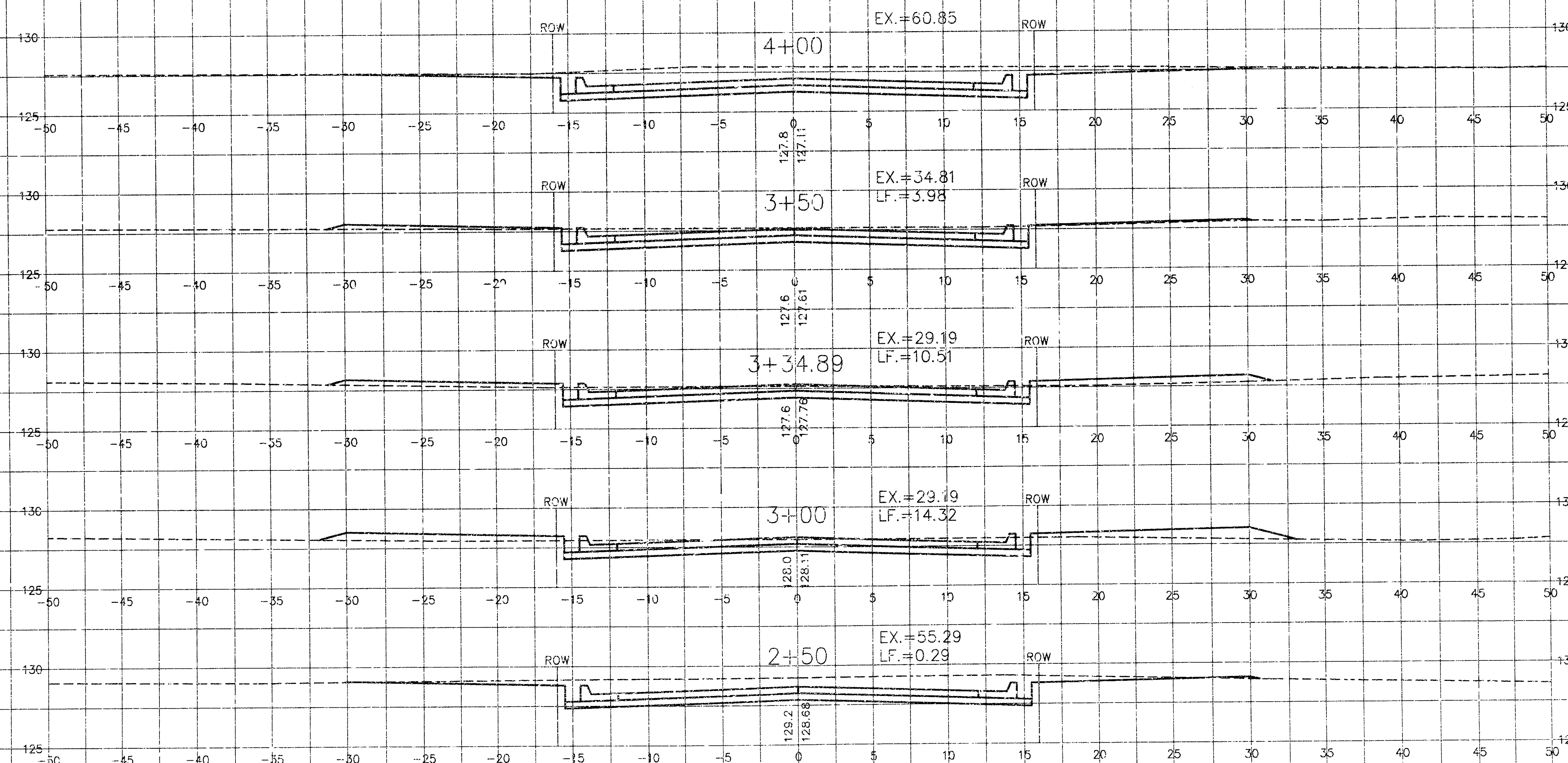


SHADE COURT

SHADY RIDGE ADDITION
SHADE COURT
CROSS SECTIONS



STATION	DIST.	AREA			VOLUME				
		CUT S.F.	LF S.F.	CF S.F.	M.F S.F.	CUT CY	FILL CY	CF CY	M.F CY
SHADY RIDGE ADDITION- AUGUST 80, 2004									
SHADE COURT									
0+00		62.3	0.0	0.0	0.0	34.9	0.0	0.0	0.0
15+04	15.04	62.9	0.0	0.0	0.0	63.1	0.0	0.0	0.0
50+00	34.95	55.6	0.0	0.0	0.0	122.1	1.6	0.0	0.0
50+00	50.00	81.8	1.7	0.0	0.0	22.3	0.7	0.0	0.0
119+35	15.35	69.9	1.1	0.0	0.0	51.8	0.7	0.0	0.0
150+00	36.65	70.9	0.0	0.0	0.0	121.5	0.9	0.0	0.0
200+00	50.00	61.4	0.3	0.0	0.0	108.0	0.6	0.0	0.0
250+00	50.00	55.3	0.3	0.0	0.0	78.2	1.5	0.0	0.0
300+00	50.00	29.1	14.0	0.0	0.0	37.7	15.0	0.0	0.0
334+33	34.33	29.2	10.3	0.0	0.0	15.1	4.1	0.0	0.0
350+00	15.11	24.8	4.0	0.0	0.0	79.3	3.7	0.0	0.0
400+00	50.00	50.9	0.0	0.0	0.0	108.0	0.6	0.0	0.0
Valley Gutter									
4+11.52	816.83	1.4	0.0	5.0	0.0	48.8	0.0	0.0	0.0
PROJECT TOTAL =						847.1	26.9	0.0	0.0



SHADE COURT

FINAL PLAT
SHADY RIDGE ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

We, MKEC Engineering Consultants, Inc., a Registered Corporate Land Surveyor in Kansas, do hereby certify that we have been in responsible charge of surveying and plating of "SHADY RIDGE ADDITION" on addition to Wichita, Sedgwick County, Kansas, into lots, a block, and streets, the same being accurately set forth in the accompanying plat and described herein.
A replica of a portion of land lying in "Woodland Heights 2nd Addition", an addition to Wichita, Kansas, TOGETHER WITH:
A replica of all of Lot 2, said addition, EXCEPT, West 260 feet thereof,
A replica of Lots 3 and 4, of said addition.

All reserves, streets, utility easements, building setbacks, access control, together with, a Drainage Easement recorded Film 198, Page 170, together with, a Utility Easement recorded Film 2332, Page 247, together with any and all established public rights-of-way within the above described property are hereby vacated and replatted by virtue of K.S.A. 12-512(b).

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ____ day of _____, 2004.

Gregory J. Allison, PELS #1257
MKEC Engineering Consultants, Inc.
411 North Webb Road
Wichita, Kansas 67206

Know all men by these presents that we the undersigned property owners of the land above set forth in the Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into lots, a block, and streets the same to be known as "SHADY RIDGE ADDITION" an addition to Wichita, Sedgwick County, Kansas. Easements for the construction and maintenance of public utilities and drainage, as indicated on the accompanying plat are hereby granted to the public. Streets are hereby dedicated to and for the public. A drainage plan has been developed for this plat and all drainage easements, right-of-way, or reserves shall remain established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of storm water. This plat shall be subject to the provisions of the "Minimum Pad Elevations" table, which shall be attached to the Plat and Meridian. Lots 6, 7, 17, 18, 19, 20, 21, 31, 32, 33, 34, 35, and 36, are required to adhere to the minimum pad elevation as shown on the "Minimum Pad Elevations" table.

THE CREW, A KANSAS GENERAL PARTNERSHIP

Roger W. Evans, Partner

Tom Warner, Partner

Bruce Riddle, Partner

STATE OF KANSAS, SEDGWICK COUNTY) ss
This instrument was acknowledged before me on ____ day of _____, 2004, by Roger W. Evans, Tom Warner, and Bruce Riddle, Partners, The Crew, a Kansas General Partnership.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

My Term Expires: _____, Notary Public

We Prairie State Bank, holders of a mortgage on the above described property, do hereby consent to the plat of "SHADY RIDGE ADDITION."

PRAIRIE STATE BANK

Carmen Campbell, Senior Vice President

This instrument was acknowledged before me on ____ day of _____, 2004, by Carmen Campbell, Senior Vice President, Prairie State Bank.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

My Term Expires: _____, Notary Public

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

Dated this ____ day of _____, 2004
WICHITA-SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION

Ronald L. Marnett, Chair

John L. Schlegel, Secretary

At the direction of the City Council.

Carlos Mayan, Mayor

Karen Sabelfeld, City Clerk

Entered on transfer record this ____ day of _____, 2004

Don Brase, County Clerk

STATE OF KANSAS, SEDGWICK COUNTY) ss
This is to certify that this instrument was filed for record in the Register of Deeds office this ____ day of _____, 2004, at ____ o'clock, M., and is duly recorded.

Bill Meek, Register of Deeds

Linda Kizine, Deputy

Reviewed in accordance with K.S.A. 58-2205 on this ____ day of _____, 2004.

Tricia L. Robello, LS #1246
Deputy Surveyor
Sedgwick County, Kansas

ZONING
This plat shall conform to recorded Community Unit Plan UP-39

BENCH MARKS

BM #1 City Plat NW corner KCEC West side of Shade and Winterset at SW corner of plat. Elev. = 127.21' City Datum 1317.61' NGVD

BM #2 Square on NW corner S. side Shade at F.C. of Lot 1, Blk. 1, Farmington Square 2nd Add. Elev. = 146.00' City Datum 1333.46' NGVD

EASEMENTS

All easements encircling the streets are plotted 15 foot street drainage, and utility easement except where otherwise noted.

LEGEND

- Found Survey Monument (see annotated caption for type)
- 5/8" Rebar w/ MKEC CLS 39' Id. Cap
- (P) = Plotted
- (M) = Measured
- (CM) = Calculated from Measurements
- U.E. = Utility Easement
- D.E. = Drainage Easement

