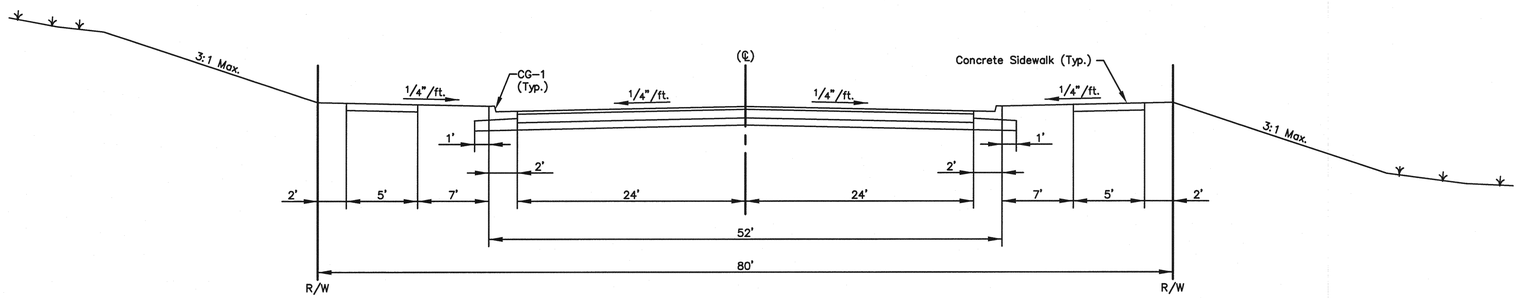


Botts Road
Sta. 22+52.37 to Sta. 44+83.03
Secondary Arterial Typical Section

Scale: N.T.S.

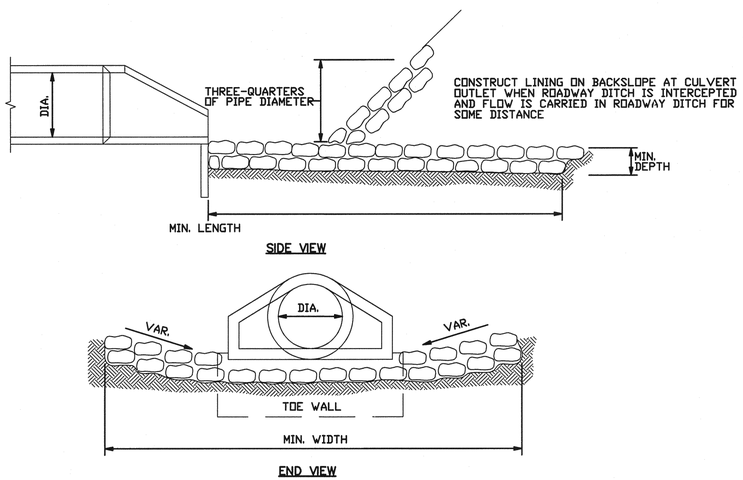
2" TYPE 3-01 ASPHALTIC CONCRETE SURFACE
9" TYPE 1-01 ASPHALTIC CONCRETE BASE COURSE
6" MIN. COMPACTED SUBGRADE
95% OF STANDARD MAX. DENSITY

OR

8" PORTLAND CEMENT CONCRETE
6" MIN. COMPACTED SUBGRADE
95% OF STANDARD MAX. DENSITY

Notes:

1. See sheet 4 for location of pavement types.



ROCK LINING FOR CULVERT OUTLET
Not To Scale

ROCK LINING FOR CULVERT OUTLETS					
CULVERT SIZE, DIA. INCH.	MIN. DEPTH AND WIDTH FEET	MIN. LENGTH FEET	ROCK LINING C.Y.	EQUIVALENT PIPE ARCH CULVERT (APPROX.)	EQUIVALENT CONC. BOX CULV. (APPROX.)
18	1 X 4	12	2		
24	1 X 6	14	3		2' X 1-1/2'
30	1 X 7	16	4	B-5	2' X 2'
36	1.5 X 9	18	9	B-6	3' X 2'
42	2 X 10	20	15	B-7	3' X 3'
48	2 X 12	20	18	B-8	4' X 3'
54	2 X 13.5	22	22	B-9	4' X 4'
60	2 X 15	25	28	B-10	5' X 4'
66	2 X 18	25	33	B-11	5' X 5'
72	2 X 20	30	44	B-12	5' X 6'
84	2.5 X 25	35	81		6' X 6'
96	2.5 X 30	40	111		7' X 7'
108	3 X 32	40	142		8' X 8'

NOTE: THE DIMENSIONS SHOWN IN THE TABLE CAN BE APPLIED TO BOX OR ARCH CULVERTS OF EQUIVALENT WATERWAY AREA.

DATE	P.E. SIGNATURE	DESCRIPTION
09-07-07	R.J.S.	Prepared for Review.
01-25-08	R.J.S.	1 Revised typical section
05-20-08	R.J.S.	2 Added Rip-Rap Section

TYPICAL SECTIONS

CENTERPOINT-KCS INTERMODAL CENTER

STATE OF MISSOURI
ROBERT SUNTA
E-25751
REGISTERED PROFESSIONAL ENGINEER

Reviewed By:	S.E.C.
Designed By:	R.J.S.
Drafted By:	J.W.W.
Lutjen Project No.: 07165	

LUTJEN

8350 N. Saint Clair Ave.
Kansas City, MO 64151
816.587.4320
816.587.1393 fax
www.lutjen.com

surveying
planning
engineering
landscape architecture

Sheet No.:
10

Location: N:\Engineering\Richard Gebaur - 07165 & 07166\Drafting\Botts & Thunderbird Road\Street & Storm\TYP - 07165.dwg