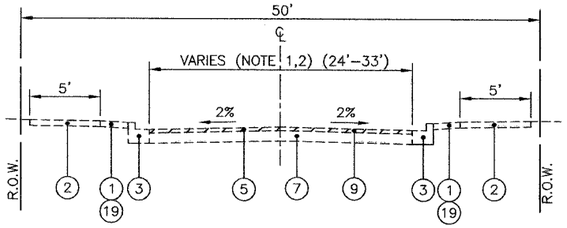
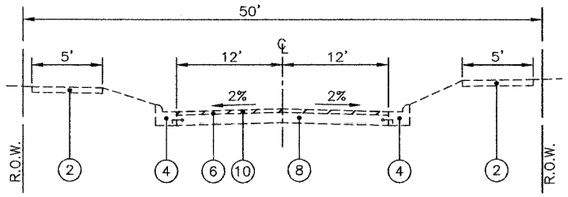
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1693	05-00071-00-RS	COOK	14	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 83848



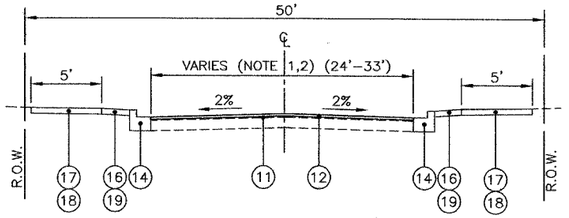
EXISTING TYPICAL SECTION
EAST QUINCY STREET

RIVERSIDE ROAD TO STA. 114+70



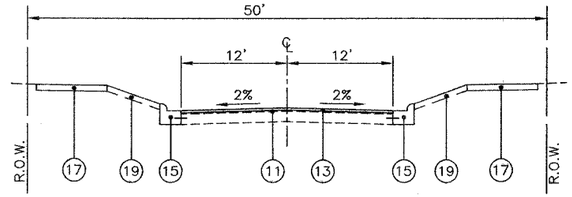
EXISTING TYPICAL SECTION
EAST QUINCY STREET

STA. 114+70 TO HARLEM AVENUE (IL. 43)



PROPOSED TYPICAL SECTION
EAST QUINCY STREET

RIVERSIDE ROAD TO STA. 114+70



PROPOSED TYPICAL SECTION
EAST QUINCY STREET

STA. 114+70 TO HARLEM AVENUE (IL. 43)

PAVEMENT DESIGN CALCULATIONS

DATE:	November 15, 2005				
IMPROVEMENT TYPE:	FLEXIBLE PAVEMENT CROSS SECTION (RESURFACING)				
LOCATION:	EAST QUINCY STREET - Village of Riverside FAU 1693				
	Riverside Road to South Cowley Road				
CLASSIFICATION OF ROADWAY:	=	CLASS II ROADWAY (ADT > 2000)			
TRAFFIC FACTOR = DP(((0.073*PV)+(44.530*SU)+(156.403*MU))/1000000)					
DESIGN LANE VOLUME % OF ADT	=	50	% TRUCKS	50	% PASS. VEHICLES
DESIGN PERIOD,YEARS (DP)	=	20	YEARS		
% OF PASSENGER VEHICLES (PV)	=	98.50	%		
% OF SINGLE UNIT TRUCKS (SU)	=	1.40	%		
% OF MULTI UNIT TRUCKS (MU)	=	0.10	%		
AVERAGE DAILY TRAFFIC	=	2000	TRAFFIC FACTOR.....	=	0.017035
DESIGN LANE VOLUME	=	1000			
N0. OF PASSENGER VEHICLES	=	985	I.B.R.....	=	2.5
NO. OF SINGLE UNIT TRUCKS	=	14			
NO. OF MULTI UNIT TRUCKS	=	1	STRUCTURAL NUMBER (Dt)	=	2.30

PROPOSED PAVEMENT CROSS SECTION

MATERIAL THICKNESS	STRUCTURAL MATERIAL	COEFFICIENT	Dt
2.00	BIT. CONC. SURFACE COURSE, SUPERPAVE, MIX C, N50	0.40	0.80
0.50	POLYMERIZED LEVELING BINDER (MM), SUPERPAVE, IL-4.75, N50	0.33	0.17
6.00	EXISTING BITUMINOUS BASE COURSE	0.23	1.38
4.00	EXISTING AGGREGATE BASE COURSE	0.11	0.44
	TOTAL Dt PROVIDED =		2.79

PAVEMENT DESIGN CALCULATIONS

DATE:	November 15, 2005				
IMPROVEMENT TYPE:	COMPOSITE PAVEMENT CROSS SECTION (RESURFACING)				
LOCATION:	EAST QUINCY STREET - Village of Riverside FAU 1693				
	South Cowley Road to Harlem Avenue (IL RT 43)				
CLASSIFICATION OF ROADWAY:	=	CLASS II ROADWAY (ADT > 2000)			
TRAFFIC FACTOR = DP(((0.073*PV)+(44.530*SU)+(156.403*MU))/1000000)					
DESIGN LANE VOLUME % OF ADT	=	50	% TRUCKS	50	% PASS. VEHICLES
DESIGN PERIOD,YEARS (DP)	=	20	YEARS		
% OF PASSENGER VEHICLES (PV)	=	98.50	%		
% OF SINGLE UNIT TRUCKS (SU)	=	1.40	%		
% OF MULTI UNIT TRUCKS (MU)	=	0.10	%		
AVERAGE DAILY TRAFFIC	=	2000	TRAFFIC FACTOR.....	=	0.017035
DESIGN LANE VOLUME	=	1000			
N0. OF PASSENGER VEHICLES	=	985	I.B.R.....	=	2.5
NO. OF SINGLE UNIT TRUCKS	=	14			
NO. OF MULTI UNIT TRUCKS	=	1	STRUCTURAL NUMBER (Dt)	=	2.30

PROPOSED PAVEMENT CROSS SECTION

MATERIAL THICKNESS	STRUCTURAL MATERIAL	COEFFICIENT	Dt
1.50	BIT. CONC. SURFACE COURSE, SUPERPAVE, MIX C, N50	0.40	0.60
0.50	POLYMERIZED LEVELING BINDER (MM), SUPERPAVE, IL-4.75, N50	0.33	0.17
10.00	EXISTING PCC BASE COURSE	0.26	2.60
4.00	EXISTING AGGREGATE BASE COURSE	0.11	0.44
	TOTAL Dt PROVIDED =		3.81

LEGEND

(1) EXISTING PCC SIDEWALK (NOTE 1)
(2) EXISTING PCC SIDEWALK (PEA GRAVEL MIX) (NOTE 2)
(3) EXISTING CURB AND GUTTER, TYPE B-6.18 (NOTE 1)
(4) EXISTING CURB AND GUTTER, TYPE M-4.18 (NOTE 2)
(5) EXISTING BITUMINOUS CONCRETE SURFACE COURSE (APPROX. 2" THICK)
(6) EXISTING BITUMINOUS CONCRETE SURFACE COURSE, (APPROX. 1-1/2" THICK)
(7) EXISTING BITUMINOUS BASE COURSE, (APPROX. 6" THICK)
(8) EXISTING PCC BASE COURSE (APPROX. 10" THICK)
(9) PROPOSED BITUMINOUS SURFACE REMOVAL, 2"
(10) PROPOSED BITUMINOUS SURFACE REMOVAL, 1-1/2" (CONTRACTOR SHALL REMOVE ALL BITUMINOUS FROM EXISTING CONCRETE BASE. COST INCLUDED WITH REMOVAL)
(11) PROPOSED POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50, 0"-1/2"
(12) PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 2"
(13) PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50, 1-1/2"
(14) PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (NOTE 1) (AS DIRECTED BY THE ENGINEER)
(15) PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.18 (NOTE 2) (AS DIRECTED BY THE ENGINEER)
(16) PROPOSED PCC SIDEWALK, 5 INCH (NOTE 1,3)
(17) PROPOSED PCC SIDEWALK, 5 INCH (PEA GRAVEL MIX), (NOTE 2,3) OR PROPOSED PCC SIDEWALK, 7 INCH (PEA GRAVEL MIX). (NOTE 2,3)
(18) PROPOSED PCC SIDEWALK, 5 INCH (SWANEE MIX) (NOTE 1,3)
(19) TOPSOIL FURNISH AND PLACE 4" SEEDING (AS DIRECTED BY THE ENGINEER)

NOTE 1: RIVERSIDE ROAD TO STA. 105+60 (33' E-E)
NOTE 2: STA. 105+60 TO HARLEM AVENUE (24' E-E)
NOTE 3: MINIMUM 2 INCH CA-6 SUBBASE REQUIRED (COST INCLUDED WITH SIDEWALK)

BITUMINOUS MIXTURE REQUIREMENT

ITEM	AC TYPE	VOIDS	MAX RAP %
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE IL-4.75 N50	SBS/SBR PG 76-28	2.5%@50 GYR	0
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX C, N50	PG 64-22	4%@50 GYR	15
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE IL 19.0, N70 (CLASS D PATCHES, 6" & 10")	PG 64-22	4%@70 GYR	15
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE IL 19.0, N50 (DRIVEWAY BASE, 5")	PG 58-22	4%@50 GYR	25
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX C, N50 (DRIVEWAY SURFACE, 2")	PG 64-22	4%@50 GYR	15

UNIT WEIGHT FOR ALL BITUMINOUS SURFACE MIX IS 112 LBS/SY/IN

REVISIONS		
	NAME	DATE
1	IDOT	12/22/05

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 1693
EAST QUINCY STREET

TYPICAL SECTIONS

SCALE: NTS
DATE:
DRAWN BY: SMP
CHECKED BY: JDM