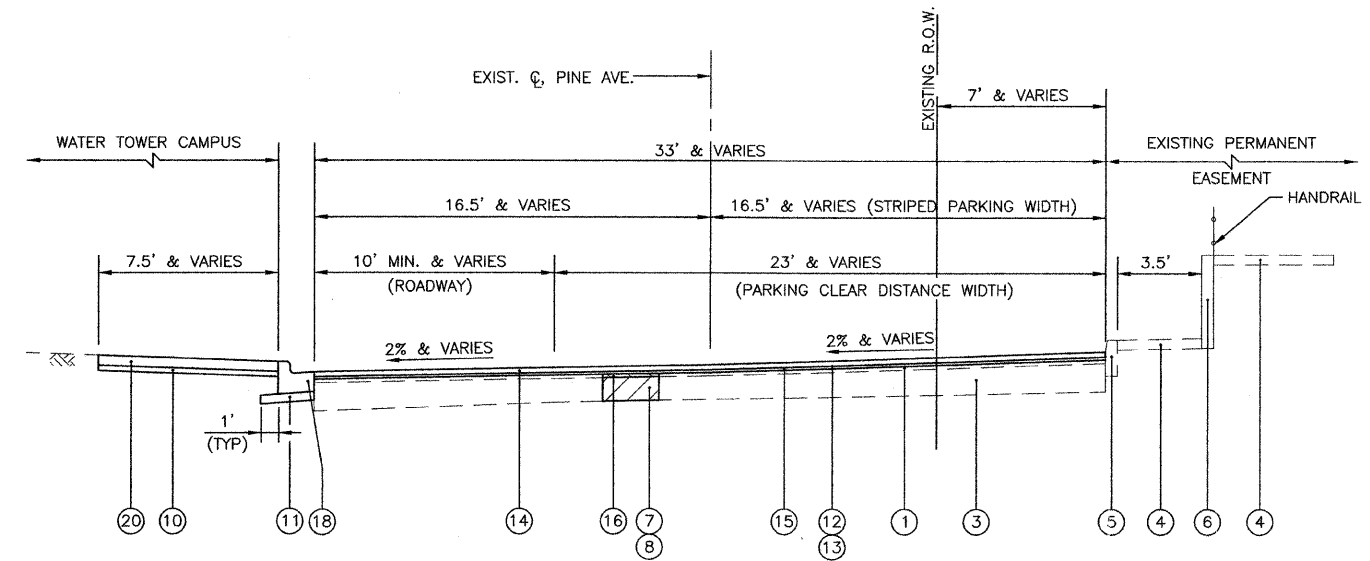


F.A.U. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4724 3569	06-00073-00-LS	COOK	24	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 63133				

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AC TYPE	VOIDS
PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "C" N50, 2 1/2" (IL-9.5mm)	PG 64-22	4% @ 50 Gyr.
LEVEL BINDER (MACHINE METHOD), N50, (IL-9.5mm)	PG 64-22*	4% @ 50 Gyr.
PATCHING		
CLASS D PATCHES, 2" (HMA BINDER IL-19mm)	PG 64-22*	4% @ 70 Gyr.
CLASS D PATCHES, 8" (HMA BINDER IL-19mm)	PG 64-22*	4% @ 70 Gyr.

NOTE: 1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA QUANTITIES IS 112 LB/SY/IN  
 2) \*-WHEN RAP EXCEEDS 20% THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22



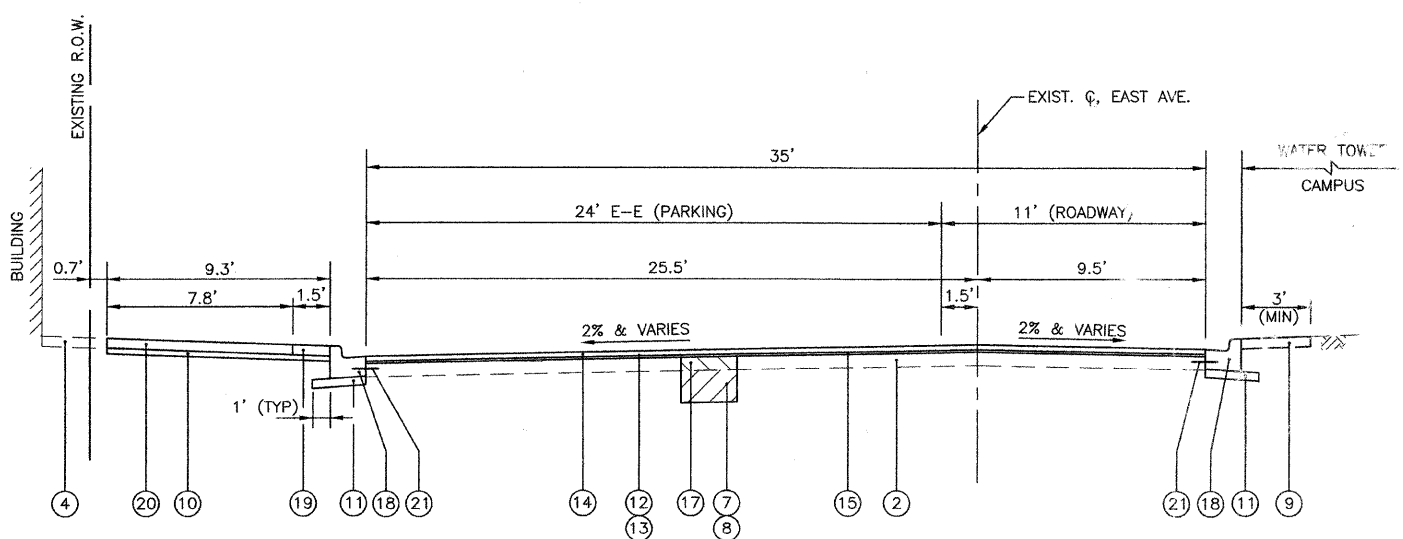
**PROPOSED TYPICAL SECTION - PINE AVENUE**  
 STA. 1+66.40 TO STA. 5+27.80

PAVEMENT DESIGN CALCULATIONS			
DATE:	NOVEMBER 18, 2008		
IMPROVEMENT TYPE:	FLEXIBLE PAVEMENT CROSS SECTION (RESURFACING)		
LOCATION:	PINE AVENUE		
CLASSIFICATION OF ROADWAY:	CLASS III ROADWAY (ADT > 400 AND < OR = 2000)		
TRAFFIC FACTOR = DP((0.073*PV)+(44.350*SU)+(154.943*MU)/1000000)	50 %PASS. VEHICLES		
DESIGN LANE VOL. % OF ADT	100 % TRUCKS		
DESIGN PERIOD YEARS (DP)	20 YEARS		
% OF PASSENGER VEHICLES	98.00 %		
% OF SINGLE UNIT TRUCKS	1.90 %		
% OF MULTI UNIT TRUCKS	0.10 %		
AVERAGE DAILY TRAFFIC	=	600	TRAFFIC FACTOR.....
NO. OF PASSENGER VEHICLES (PV)	=	588	0.012830
NO. OF SINGLE UNIT TRUCKS (SU)	=	11	I.B.R.....
NO. OF MULTI UNIT TRUCKS (MU)	=	1	2.5
			STRUCTURAL NUMBER (S <sub>n</sub> )
			2.20
MATERIAL THICKNESS	STRUCTURAL MATERIAL	COEFFICIENT	Dt
2.50	HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50	0.40	1.00
1.50	EXIST. HMA BINDER COURSE	0.22	0.33
16.00	EXIST. SUBBASE GRAN. MATL.	0.08	1.28
TOTAL Dt Provided =			2.61

**PINE AVENUE**

PAVEMENT DESIGN CALCULATIONS			
DATE:	NOVEMBER 18, 2008		
IMPROVEMENT TYPE:	COMPOSITE PAVEMENT CROSS SECTION (RESURFACING)		
LOCATION:	EAST AVENUE		
CLASSIFICATION OF ROADWAY:	CLASS III ROADWAY (ADT > 400 AND < OR = 2000)		
TRAFFIC FACTOR = DP((0.073*PV)+(44.350*SU)+(154.943*MU)/1000000)	50 %PASS. VEHICLES		
DESIGN LANE VOL. % OF ADT	100 % TRUCKS		
DESIGN PERIOD YEARS (DP)	20 YEARS		
% OF PASSENGER VEHICLES	98.00 %		
% OF SINGLE UNIT TRUCKS	1.90 %		
% OF MULTI UNIT TRUCKS	0.10 %		
AVERAGE DAILY TRAFFIC	=	600	TRAFFIC FACTOR.....
NO. OF PASSENGER VEHICLES (PV)	=	588	0.012830
NO. OF SINGLE UNIT TRUCKS (SU)	=	11	I.B.R.....
NO. OF MULTI UNIT TRUCKS (MU)	=	1	2.5
			COMPOSITE STRUCTURAL STRUCTURAL NUMBER (S <sub>n</sub> )
			2.00
MATERIAL THICKNESS	STRUCTURAL MATERIAL	COEFFICIENT	Dt
2.50	HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50	0.40	1.00
8.00	EXIST. P.C.C. PAVEMENT	0.17	1.36
0.00	EXIST. SUBBASE GRAN. MATL.	0.08	0.00
TOTAL Dt Provided =			2.36

**EAST AVENUE**



**PROPOSED TYPICAL SECTION - EAST AVENUE**  
 STA. 20+00 TO STA. 23+33.60

- LEGEND**
- EXISTING HMA PAVEMENT, 1 1/2" L. VARIES
  - EXISTING P.C.C. BASE COURSE, 8" & VARIES
  - EXISTING AGGREGATE BASE COURSE, 16" & VARIES
  - EXISTING P.C.C. SIDEWALK
  - EXISTING CONCRETE CURB, TYPE B
  - EXISTING RETAINING WALL
  - POROUS GRANULAR EMBANKMENT, SUBGRADE (AT LOCATIONS DESIGNATED BY THE ENGINEER)
  - GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (AT LOCATIONS DESIGNATED BY THE ENGINEER)
  - SODDING, SPECIAL (INCLUDES 4" PULVERIZED TOP SOIL AND FERTILIZER) (AT LOCATIONS DESIGNATED BY THE ENGINEER)
  - SUB-BASE GRANULAR MATERIAL, TYPE B 2" (COST INCLUDED IN P.C.C. SIDEWALK)
  - SUB-BASE GRANULAR MATERIAL, TYPE B 4" (COST INCLUDED IN CONCRETE CURB AND GUTTER)
  - BITUMINOUS MATERIALS (PRIME COAT)
  - AGGREGATE (PRIME COAT)
  - HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50, 2 1/2"
  - LEVELING BINDER (MACHINE METHOD), N70, VARIABLE THICKNESS (MINIMUM 3/4" THICKNESS)
  - CLASS D PATHES, 2" (AT LOCATIONS DESIGNATED BY THE ENGINEER)
  - CLASS D PATHES, 8" (AT LOCATIONS DESIGNATED BY THE ENGINEER)
  - COMBINATION CONCRETE CURB AND GUTTER, TYPE B-8.12 (THICKNESS OF GUTTER FLAG SHALL BE 10" EXCEPT WHERE ADJACENT TO PCC PAVEMENT. WHEN ADJACENT TO PCC PAVEMENT, BOTTOM OF GUTTER SHALL BE AT THE SAME GRADE AS THE BOTTOM OF THE P.C.C. PAVEMENT)
  - PORTLAND CEMENT CONCRETE SIDEWALK 5" (AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER)
  - PORTLAND CEMENT CONCRETE SIDEWALK 5", SPECIAL (SWANEE MIX) (AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER)
  - 24" LONG DEFORMED EPOXY-COATED NO. 8 TIE BARS, 24" CTRS. DRILLED AND GROUTED IN PLACE (COST INCLUDED IN CONCRETE CURB AND GUTTER)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 EAST AVENUE TO PINE AVENUE  
 VILLAGE OF RIVERSIDE  
 RAILWAY/WATER TOWER CAMPUS RESTORATION PROJECT

PROPOSED TYPICAL SECTIONS

SCALE: 1"=20'  
 DATE: 12/01/08

DRAWN BY: SMP  
 CHECKED BY: BDH