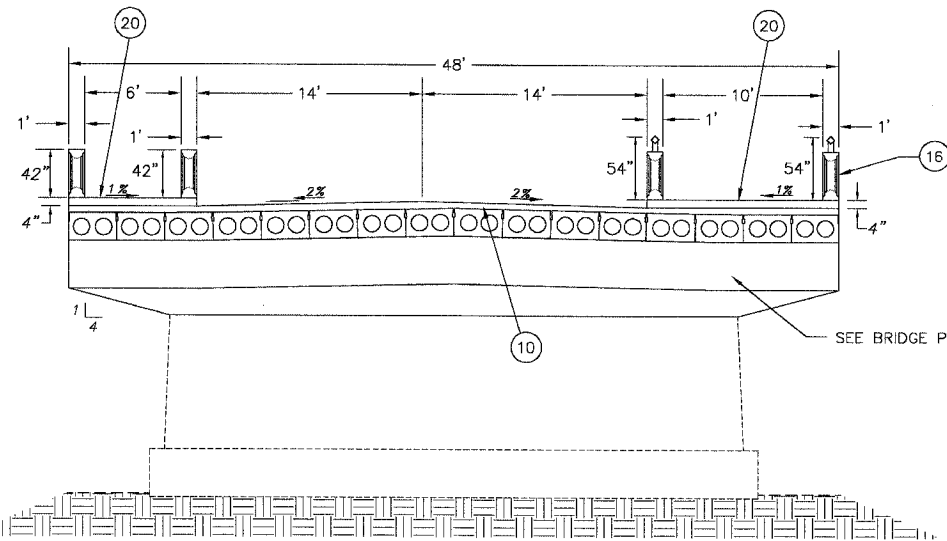


MAIN STREET - PROPOSED TYPICAL SECTION

STA. 106+41 TO 110+96
STA. 113+10 TO 116+22

* SEE CROSS SECTIONS FOR SLOPES
** VARIES FROM STA. 109+66 TO STA. 110+95



MAIN STREET BRIDGE - PROPOSED TYPICAL SECTION

STA. 110+96 TO 113+10

BITUMINOUS MIXTURE REQUIREMENT

ITEM DESCRIPTION	AC TYPE	VOIDS	RAP %	THICKNESS
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 Gyr.	10%	1½"
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 Gyr.	15%	2½"
BITUMINOUS BASE COURSE, SUPERPAVE 10" (ROADWAY)	PG 58-22	2% @ 50 Gyr.	50%	10"

LEGEND

- 1 EXISTING BITUMINOUS PAVEMENT 4.25" - 8.5"
- 2 EXISTING PAVING BRICKS, 3.5"
- 3 EXISTING SAND BASE, 2" - 3"
- 4 EXISTING CONCRETE BASE, 3" - 5"
- 5 EXISTING PCC SIDEWALK
- 6 EXISTING CONCRETE CURB AND GUTTER
- 7 EXISTING WATERMAIN, 16" *
- 8 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
- 9 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
- 10 PROPOSED CONCRETE WEARING SURFACE, 5"
- 11 PROPOSED AGGREGATE BASE 2" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
- 12 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5"
- 13 PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 10"
- 14 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- 15 PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
- 16 PROPOSED CONCRETE BRIDGE RAIL, SPECIAL
- 17 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH, SEE NOTE BELOW)
- 18 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MINIMUM THICKNESS OF GUTTER FLAG SHALL BE 9". ADDITIONAL AGGREGATE UNDER GUTTER FLAG SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12)
- 19 PROPOSED GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (SEE NOTE BELOW)
- 20 PROPOSED CONCRETE SUPERSTRUCTURE (CLASS BD CONCRETE) 4" THICK

"POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES OVER GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR."

ALL RECOMMENDED UNDERCUTS ARE FROM 6" OUTSIDE THE EDGES OF CURB AND GUTTER. DEPTHS WILL BE DETERMINED BY A LICENSED SOILS ENGINEER. LIMITS ARE FROM STA 106+41 TO 110+96 AND 113+10 TO 116+22.

PAVEMENT STRUCTURAL DESIGN - MAIN STREET
DESIGN SPEED = 30 MPH

STRUCTURAL DESIGN TRAFFIC		DESIGN YEAR = 2023	
CLASSIFICATION:	CLASS II	ADT:	23,000
DESIGN PERIOD:	20 YEARS	PV:	22,654
TRAFFIC FACTOR:	4.74	SU:	231
ILLINOIS BEARING RATIO:	3	MU:	231
STRUCTURAL DESIGN #(Dt):	4.84		
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"		x .40	= 0.60
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"		x .33	= 0.83
BITUMINOUS BASE COURSE, SUPERPAVE, 10"		x .33	= 3.33
SUB-BASE GRANULAR MATERIAL, TYPE B-4"		x .11	= 0.44
			5.17

* EXISTING WATER MAIN TO REMAIN IN SERVICE UNTIL PROPOSED WATER MAIN HDPE PRESSURE PIPE, DIRECTIONAL BORING, 16" IS COMPLETED, TESTED, AND IN SERVICE.

REVISIONS	
NAME	DATE
7.	
6.	
5.	
4.	
3.	
2.	
1.	

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ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

VILLAGE OF CARPENTERSVILLE
MAIN STREET OVER THE FOX RIVER
PROPOSED TYPICAL SECTIONS

SCALE: "NTS"
DATE 02-25-2005

DRAWN BY W.JH
CHECKED BY TEH