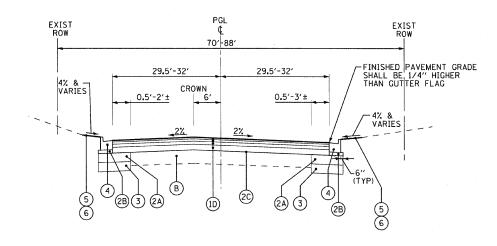
STRUCTURAL DESIGN DATA

STREET	STRUCTURA	AL DESIGN TR	AFFIC 2021	STREET CLASS	TRAFFIC FACTOR	SSR	TEMP	STRAIN	AC	EAC	REQ'D HMA THICKNESS	MECHANISTIC PAVEMENT DESIGN
	PV	SU	MU						,	-		
												FULL DEPTH PAVEMENT
PEACE ROAD	24,245	285	2,037	1	9.19	POOR	78° F	54	PG 58-28	510	15.75	2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
												2 3/4" HOT-MIX BINDER COURSE, IL-19.0, N70
												11" HOT-MIX BINDER COURSE, IL-19.0, N70
												12" AGGREGATE SUBGRADE



PROPOSED TYPICAL SECTION **PEACE ROAD**

STA. 146+00 TO STA. 149+00

EXISTING LEGEND

(A) HOT-MIX ASPHALT PAVEMENT 7.5"± AGGREGATE BASE COURSE 20"± AGGREGATE SHOULDER COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.18 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 EXISTING GUARDRAIL

(G) GROUND SURFACE PAVEMENT REMOVAL

AGGREGATE BASE COURSE GRADING (SEE NOTE 1) (INCLUDED IN PREPARATION OF BASE)

COMBINATION CURB AND GUTTER REMOVAL

GUARDRAIL REMOVAL

AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION) ITEM TO BE REMOVED

(IA) HOT-MIX ASPHALT - OVERLAY - 7"

SURFACE COURSE, MIX "D" N70 - 2" BINDER COURSE, IL-19.0, N70 - 2.75" BINDER COURSE, IL-19.0, N70 - 2.25" (SEE NOTE 4)

(1B) HOT-MIX ASPHALT - OVERLAY - 8.75" SURFACE COURSE, MIX "D" N70 - 2" BINDER COURSE, IL-19.0, N70 - 2.75" BINDER COURSE, IL-19.0, N70 - 4" (SEE NOTE 4)

(IC) HOT MIX ASPHALT - 15.75" SURFACE COURSE, MIX "D" N70 - 2" BINDER COURSE, IL-19.0, N70 - 2.75" BINDER COURSE, IL-19.0, N70 - 2.25" (SEE NOTE 4) BINDER COURSE, IL-19.0, N70 - 8.75" (SEE NOTE 5)

(1D) HOT MIX ASPHALT - 15.75"

SURFACE COURSE, MIX "D" N70 - 2" BINDER COURSE, IL-19.0, N70 - 2.75" BINDER COURSE, IL-19.0, N70 - 4" (SEE NOTE 4) BINDER COURSE, IL-19.0, N70 - 7" (SEE NOTES 3 & 5)

(2A) AGGREGATE, SUBGRADE - 12" (2B) AGGREGATE BASE COURSE, TYPE B - 4"

(2C) PREPARATION OF BASE (SEE NOTE 1) 3) POROUS GRANULAR EMBANKMENT, SUBGRADE AND GEOTECHNICAL FABRIC (SEE NOTE 2)

(4) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (11.5" FLAG DEPTH) (5) TOPSOIL, FURNISH AND PLACE, 4" 6 SEEDING, CLASS 2, FERTILIZER AND EROSION BLANKET

(7) CLASS D PATCHES TYPE I-IV, 8" (SEE NOTE 6)

(8) STEEL PLATE BEAM GUARDRAIL, TYPE A

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA BINDER & PATCHES	HMA SURFACE	TEMP. PAVEMENT
PG GRADE	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0% @ N70	4.0% @ N70	4.0% @ N50
MIXTURE COMPOSITION	IL. 19.0	IL. 9.5	IL. 19.0
FRICTION AGGREGATE		MIXTURE D	
DENSITY TEST METHOD	CORES/CORRELATION	CORES/CORRELATION	CORES/CORRELATION

- MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE OC/OA SPECIFICATION.
- •• WHEN RAP EXCEEDS 20%, THE VIRGIN ASPHALT BINDER SHALL BE REDUCED BY ONE GRADE (i.e. 25% RAP WOULD REQUIRE A VIRGIN ASPHALT BINDER GRADE OF PG64-22 TO BE REDUCED TO A PG58-22).

- 1. GRADE EXCESS AGGREGATE BASE COURSE INTO WIDENING AREA.
- 2. POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) 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 WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHALL BE TESTED WITH A DYNAMIC CONE PENETROMETER AND TRATED IN ACCORDANCE WITH ARTICLES 301.03 AND 301.04. IF UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.

THE FOLLOWING LIMITS OF UNSTABLE SOILS HAVE BEEN IDENTIFIED FOR ESTIMATING PURPOSES:

ROADWAY LIMITS ESTIMATED UNDERCUT

STA. 137+50 TO STA. 140+50 STA. 146+45 TO STA. 149+00

- 3. REPLACE ASPHALT BINDER COURSE WITH PCC BASE COURSE WIDENING 7" WHERE ASPHALT WIDENING IS LESS THAN 12" WIDE.
- 4. TRANSITION BINDER DEPTH FROM 2.25" TO 4" FROM STA. 133+50 TO STA. 135+00.
- 5. TRANSITION BINDER DEPTH FROM 8.75" TO 7" FROM STA. 133+50 TO STA. 135+00.
- 6. AS DETERMINED BY THE ENGINEER.

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DESIGNED	- DJS	REVISED -08-4-2010 IDOT REVIEW
DRAWN	- UKB	REVISED -
CHECKED	- RWL	REVISED -
DATE	- 05-03-2010	FILE NAME -081068-sht-typical.dgr

CITY OF DEKALB, ILLINOIS PEACE ROAD **IMPROVEMENTS**

PROPOSED LEGEND

SECTION COUNTY TOTAL SHEE RTE. TYPICAL SECTIONS AND 5369 06-00172-00-WR DeKALB STRUCTURAL DESIGN DATA CONTRACT NO. 87465