HOT-MIX ASPHALT MIXTURE REQUIREMENTS NOTES

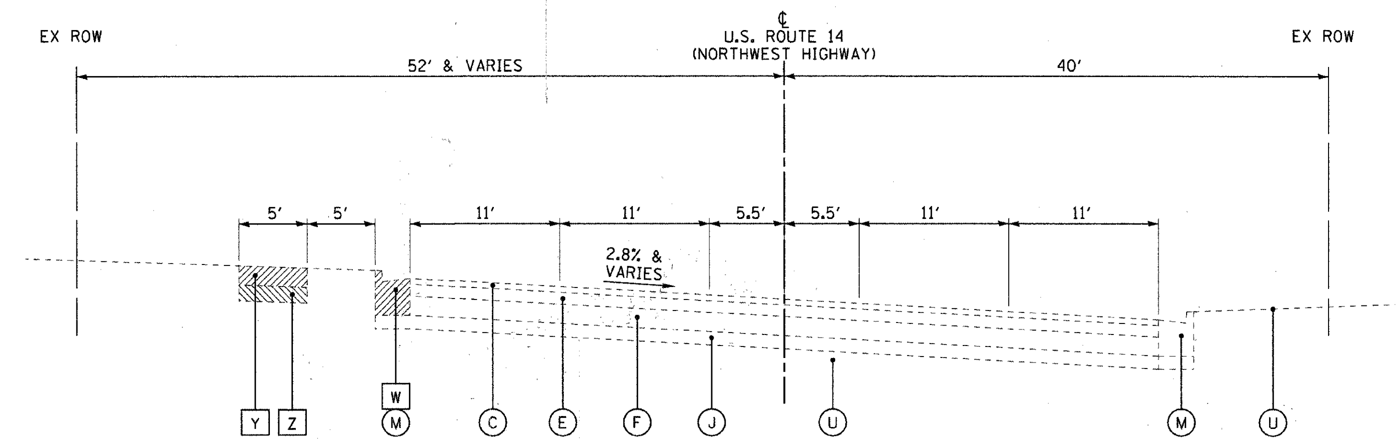
1. CONTRACTOR SHALL MILL BEFORE PATCHING

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT WIDENING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90; (IL 9.5mm); 2"	4% @ 90 GYR
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90; 2 1/2"	4% @ 90 GYR
HMA BASE COURSE (HMA BINDER IL-19mm); 10"	4% @ 90 GYR
PAVEMENT RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 1 1/2"	4% @ 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 1"	4% @ 50 GYR
DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); 1 1/2"	4% @ 50 GYR
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; 1"	4% @ 50 GYR
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm); TYPE I - IV - 4 INCH OR TYPE I - IV - 6 INCH	4% @ 70 GYR

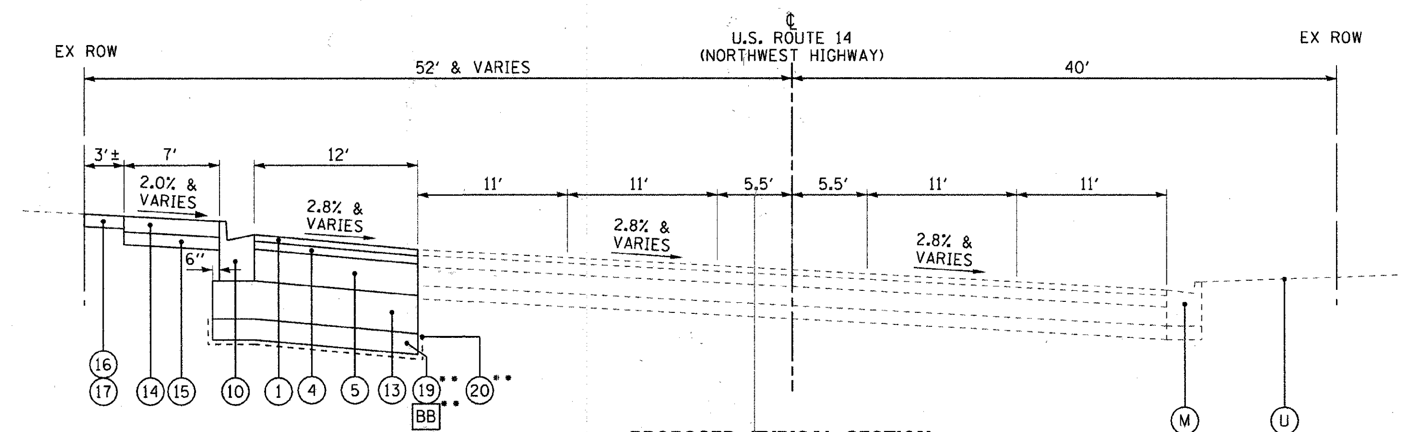
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ. YD./IN

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.



EXISTING TYPICAL SECTION
U.S. ROUTE 14 (NORTHWEST HIGHWAY)

STA. 182+00 TO STA. 185+30
NOT TO SCALE



PROPOSED TYPICAL SECTION
U.S. ROUTE 14 (NORTHWEST HIGHWAY)

STA. 182+00 TO STA. 185+30
NOT TO SCALE

EXISTING LEGEND

- (A) HOT-MIX ASPHALT SURFACE COURSE, 1"
- (B) HOT-MIX ASPHALT SURFACE COURSE, 1 1/4"
- (C) HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
- (D) HOT-MIX ASPHALT SURFACE COURSE, 2 1/4"
- (E) HOT-MIX ASPHALT BINDER COURSE, 3"
- (F) HOT-MIX ASPHALT BASE COURSE, 10"
- (G) BITUMINOUS STABILIZED GRANULAR MATERIAL, 2 1/2"
- (H) BITUMINOUS STABILIZED GRANULAR MATERIAL, 3 1/2"
- (I) AREA REFLECTIVE CRACK CONTROL TREATMENT (PETROMAT)
- (J) SUB-BASE GRANULAR MATERIAL, TYPE A, 4"
- (K) UNCRUSHED GRAVEL AND FINES, 7 1/2" - 9 1/2"
- (L) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

EXISTING LEGEND (CON'D.)

- (M) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- (N) HOT-MIX ASPHALT SHOULDER (FULL DEPTH)
- (P) AGGREGATE SHOULDER, 4"
- (R) SIDEWALK
- (S) AGGREGATE BASE COURSE
- (T) EXISTING SUB-GRADE
- (U) GROUND SURFACE
- [V] HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- [W] COMBINATION CURB AND GUTTER REMOVAL
- [X] PAVEMENT REMOVAL
- [Y] SIDEWALK REMOVAL
- [Z] AGGREGATE BASE COURSE REMOVAL (INCLUDED IN THE EARTH EXCAVATION PAY ITEM)
- [AA] AGGREGATE SHOULDER REMOVAL, 2 1/2" (INCLUDED IN EARTH EXCAVATION PAY ITEM)
- [BB] REMOVAL AND DISPOSAL OF UNSUITABLE MATERIALS ••
- (hatched) ITEM TO BE REMOVED

PROPOSED LEGEND

1. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 - 2"
2. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 - 1 1/2"
3. POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 1"
4. POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90 - 2 1/2"
5. HOT-MIX ASPHALT BASE COURSE - 10"
6. CLASS D PATCHES, TYPE I - IV, 4 INCH
7. CLASS D PATCHES, TYPE I - IV, 6 INCH
8. RESERVED
9. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)
10. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
11. HOT-MIX ASPHALT SHOULDERS, 2 1/2"
12. AGGREGATE WEDGE SHOULDER, TYPE B - 2 1/2"
13. AGGREGATE SUBGRADE 12"
14. PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
15. AGGREGATE BASE COURSE, TYPE B 4"
16. TOPSOIL FURNISH AND PLACE, 4"
17. SODDING, SALT TOLERANT
18. RESERVED
19. POROUS GRANULAR EMBANKMENT, SUBGRADE•• (AS DETERMINED BY THE ENGINEER) - 6" MIN
20. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
21. CENTERLINE SWALE

LEGEND NOTES

1. SIDEWALK REMOVAL AND REPLACEMENT TO BE DETERMINED BY THE ENGINEER, UNLESS OTHERWISE NOTED.
2. CURB AND GUTTER REMOVAL AND REPLACEMENT TO BE DETERMINED BY THE ENGINEER, UNLESS OTHERWISE SHOWN.

•• 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 GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A 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 UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

STRUCTURAL DESIGN DATA

STREET	STRUCTURAL DESIGN TRAFFIC			STREET CLASS	TRAFFIC FACTOR	SSR	TEMP	STRAIN	AC	E AC	REQ'D HMA THICKNESS	MECHANISTIC PAVEMENT DESIGN
	PV	SU	MU									
U.S. ROUTE 14	38,206	1,617	607	I	4.60	POOR	76°F	65	PG64-22	655	12.5 IN	2" POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90 2 1/2" POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90 10" HOT-MIX ASPHALT BASE COURSE 12" AGGREGATE SUBGRADE

• F.A.P. ROUTE 0305 U.S. ROUTE 14 (NORTHWEST HIGHWAY)
F.A.U. ROUTE 3877 EAST MAIN STREET

BAXTER & WOODMAN Consulting Engineers

DESIGNED - JJF	REVISED - MCDPD REVIEW 11/3/09
DRAWN - CJC	REVISED - IDOT REVIEW 11/17/09
CHECKED - RWL	REVISED -
DATE - 09/11/09	FILE - 080298-TYP_SEC.sht

VILLAGE CARY, ILLINOIS
U.S. ROUTE 14 AT EAST MAIN STREET RIGHT-TURN LANE STP AND EAST MAIN STREET ARRA IMPROVEMENTS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS STRUCTURAL DESIGN DATA AND TYPICAL SECTIONS

SCALE: NONE — STA. 182+00 TO STA. 185+30

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	08-00054-00-CH	McHENRY	56	9
C-91-619-09		CONTRACT NO. 63404		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT M-ARA-9003(313)		