

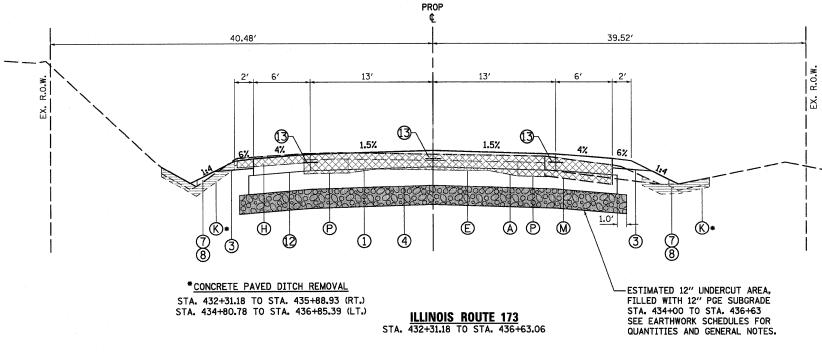
ILLINOIS ROUTE 173 STA. 429+80.00 TO STA. 432+31.18 STA. 449+53.82 TO STA. 451+97.00

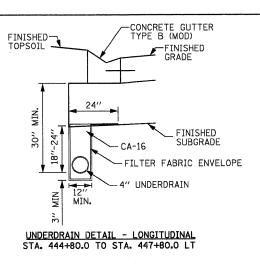
# STRUCTURAL PAVEMENT DESIGN - HMA TEMP. PAVEMENT

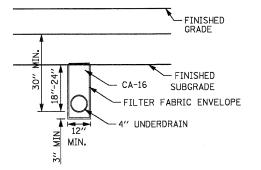
STRUCTURAL DESIGN TRAFFIC: Year 2010
PV = 3219 SU = 259 MU = 222
ROAD/STREET CLASSIFICATION: Class 2
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 87 S = 7 M = 6
TRAFFIC FACTOR: Actual TF = 0.12
MINIMUM TF = N/A
PG GRADE: BINder = PG 58-22 SUrface = PG 64-22/58-22
SUBGRADE SUPPORT RATING: SSR = POOR

## STRUCTURAL PAVEMENT DESIGN-PCC

STRUCTURAL DESIGN TRAFFIC: Year 2021
PV = 4785 SU = 385 MU = 330
ROAD/STREET CLASSIFICATION: Class 2
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 87 S = 7 M = 6
TRAFFIC FACTOR: Actual TF = 4.8
MINIMUM TF = 11.02
EDGE SUPPORT CONDITION: UNTIED
SUBGRADE SUPPORT RATING: SSR = POOR







<u>UNDERDRAIN DETAIL - TRANSVERSE</u> STA. 436+63.1, 439+04.7, 443+00.0, 444+80.0, & 447+80.0

#### UNDERDRAIN NOTES

- 1. PIPE UNDERDRAINS TO BE PLACED AS INDICATED ON THE PLANS.
- 2. CAPS, PLUGS, WYES, AND TEES ARE CONSIDERED INCLUDED IN THE COST OF THE UNDERDRAINS.
- 3. ALL END RUNS SHALL HAVE A CAP OR PLUG.
- UNDERDRAINS SHALL BE CONNECTED AS SHOWN ON THE PLANS WHICH COST IS INCLUDED IN THE COST OF THE UNDERDRAINS.
- UNDERDRAIN MATERIAL SHALL BE PERFORATED CORRUGATED POLYETHYLENE TUBING.
- 6. EXCAVATION, FABRIC AND POROUS GRANULAR BACKFILL AS SPECIFIED SHALL BE INCLUDED IN THE COST OF THE UNDERDRAIN.

#### LEGEND, EXISTING

- A EXISTING PCC PAVEMENT, 9"-6"-9"
- B EXISTING HMA OVERLAY, 4"
- © EXISTING HMA SHOULDER
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING PAVEMENT STRUCTURE FULL DEPTH REMOVAL
- (F) EXISTING PAVEMENT STRUCTURE SURFACE MILLING
- G EXISTING PAVEMENT STRUCTURE PAVEMENT BREAKING
- (H) EXISTING HMA SHOULDER TO BE REMOVED
- (J) EXISTING AGGREGATE SHOULDER TO BE REMOVED
- (K) EXISTING CONCRETE PAVED DITCH TO BE REMOVED
- L EXISTING CURB AND GUTTER TO BE REMOVED
- M TEMPORARY PAVEMENT FULL DEPTH REMOVAL
- (N) TEMPORARY PAVEMENT SURFACE MILLING
- O TEMPORARY PAVEMENT PAVEMENT BREAKING
- (P) EXISTING HMA WIDENING, 9"

### LEGEND, PROPOSED

- 1 PCC PAVEMENT, 91/2" (JOINTED)
- 2 2" HMA SURFACE COURSE, MIX "D", N50
- (3) AGGREGATE SHOULDER, TYPE B, 6"
- 4 AGGREGATE SUBGRADE (12")
- (5) HOT-MIX ASPHALT SHOULDERS, 81/2"
- (6) AGGREGATE BASE COURSE, TYPE B, 4"
- (7) TOPSOIL FURNISH AND PLACE, 6"
- (8) SEEDING CLASS 2A OR 4A W/ EROSION CONTROL BLANKET
- (9) STEEL PLATE BEAM GUARDRAIL, TYPE A (6' POSTS)
- (10) CONCRETE GUTTER, TYPE B (MODIFIED)
- (11) SAWCUT FULL DEPTH (INCLUDED IN COST OF WORK ITEM)
- (12) PCC SHOULDER, 91/2"
- (3) \*6 TIE BARS (INCLUDED IN COST OF PCC PAVEMENT, SHOULDER OR CURB)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
TEMPORARY PAVEMENT WIDENING - STAGE 1A (SEE NOTE 3)	
TEMP PAVEMENT (HMA BINDER IL-19 mm), 7"	4% @ 50 GYR.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm), 1-1/2"	4% @ 50 GYR.
TEMPORARY OVERLAY - STAGE 1C	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm), 1-1/2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 2-1/4"	4% @ 50 GYR.
TEMPORARY RAMP	
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 1-1/2 "	4% @ 50 GYR.
ROADWAY RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5 mm), 2"	4% @ 50 GYR.
SHOULDERS	
HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19 mm), 8-1/2"	2% @ 30 GYR.
DRIVEWAYS P.E.	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 6"	4% @ 50 GYR.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% <b>©</b> 70 GYR.

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQYD/IN.
- 2. 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.
- 3. IF CONTRACTOR CHOOSES TO USE CONCRETE FOR THE TEMPORARY PAVEMENT THE THICKNESS WILL BE 8-1/2 INCHES.

TYPICAL SECTIONS							SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						303	132 B-2	MoHENRY	106	7
								CONTRACT NO.60129		
SCALE:	CALE: SHEET NO. 7 OF 106 SHEETS STA. TO STA. FED. ROAD DIST. NO.   ILLINOIS FED. AID PROJECT									

CBBEL WEST Projects\2009\

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION