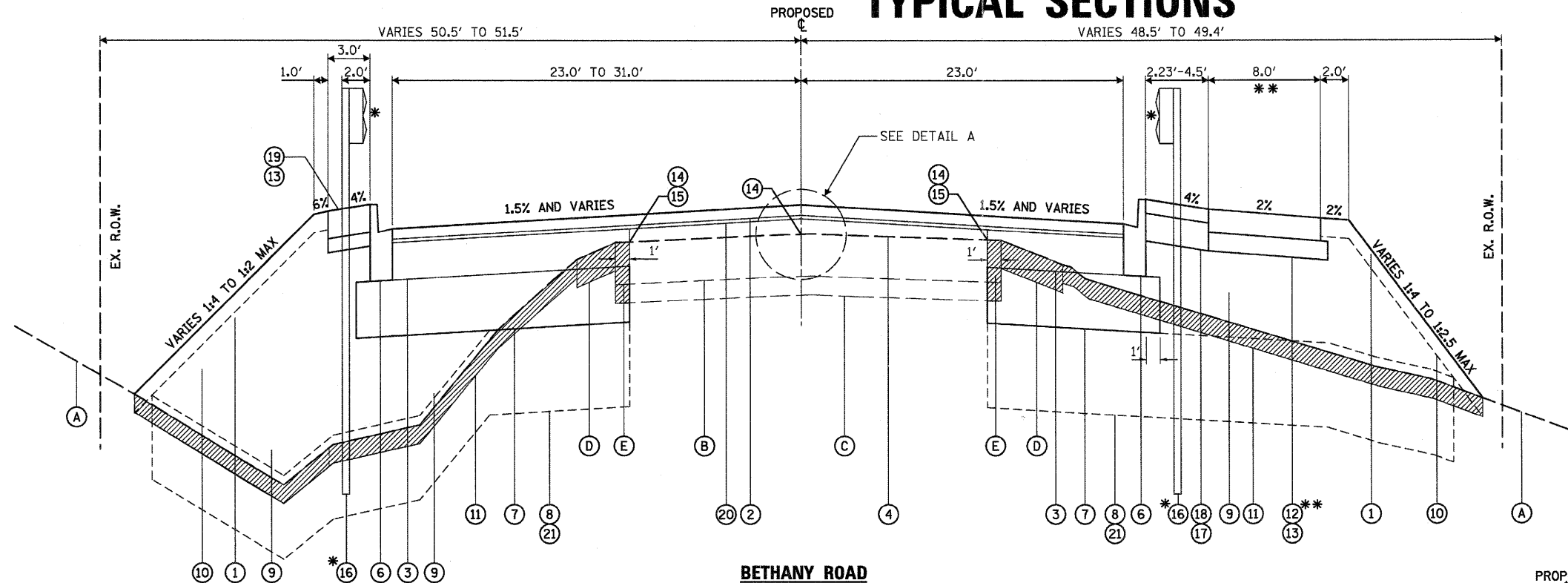


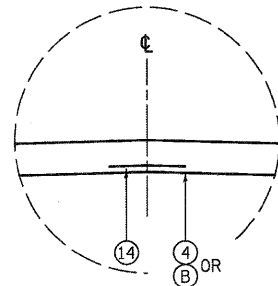
TYPICAL SECTIONS



BETHANY ROAD
 STA. 15+76.5 TO STA. 16+87.2
 OMIT BRIDGE
 STA. 18+79.7 TO STA. 19+95.2

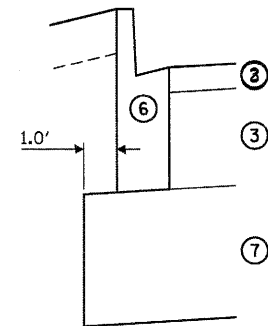
* GUARD RAIL: STA. 16+11.3 TO STA. 19+55.5 LEFT (OMIT BRIDGE)
 STA. 16+11.2 TO STA. 19+55.5 RIGHT (OMIT BRIDGE)

** 8' MULTI-USE PATH RIGHT SIDE ONLY STA. 16+72.8 TO STA. 18+94.9

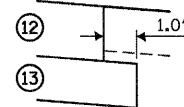


DETAIL A

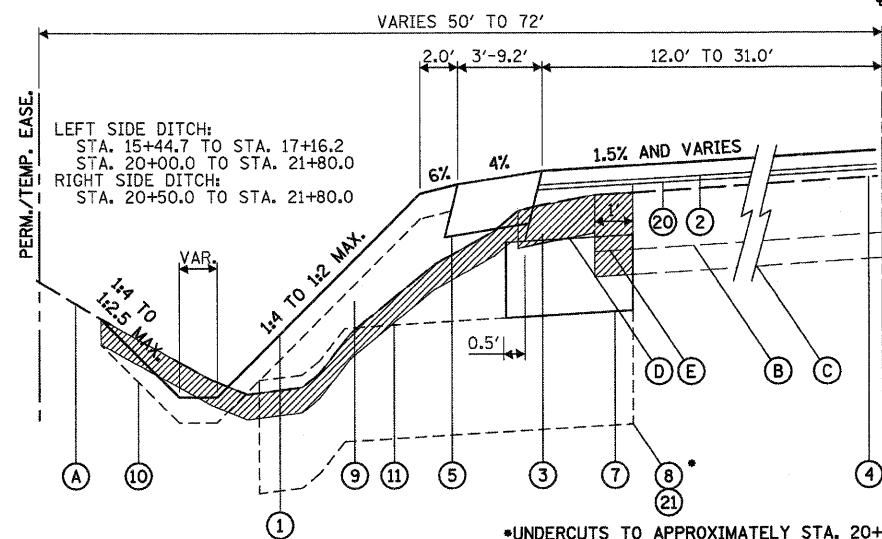
STRIP REFLECTIVE CRACK CONTROL TREATMENT SHALL BE SYSTEM A PER SEC. 443 OF THE STANDARD SPECIFICATIONS. THE STRIP REFLECTIVE CRACK CONTROL TREATMENT SHALL BE PLACED ON THE EXISTING CENTERLINE JOINT, EDGE JOINTS OF THE HMA WIDENING, AND THE EDGES OF EXISTING AND PROPOSED TRENCH PATCHES.



**BASE STAGGER DETAIL
 ADJACENT TO CURB & GUTTER**



**BASE STAGGER DETAIL
 ADJACENT TO MULTI-USE PATH**



SUPERELEVATION:
 LEFT SIDE FROM STA. 19+92 @ -2% TO STA. 20+88 @ -5%
 RIGHT SIDE FROM STA. 18+80 @ -1.5% TO STA. 20+88 @ +5%
 (BETWEEN STA. 20+88 AND STA. 21+80, TRANSITION TO THE EXISTING CROSS SLOPE)

BETHANY ROAD
 STA. 14+80.0 TO STA. 15+76.5
 STA. 19+95.2 TO STA. 21+80.0

LEGEND, EXISTING

- (A) EXISTING GROUND
- (B) EXISTING BIT. CONC. PAVEMENT (8.8"-10.8")
- (C) EXISTING AGGREGATE BASE (UNKNOWN THICKNESS)
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING PAVEMENT (TO BE REMOVED)
- (F) EXISTING PAVEMENT (TO BE SURFACE MILLED)

LEGEND, PROPOSED

- (1) PROPOSED GRADE
- (2) 1 1/2", HMA SURFACE COURSE, MIX "D", N50
- (3) 8 3/4", HMA BINDER COURSE, IL-19.0, N50
- (4) HMA BINDER COURSE, IL-19.0, N50, VARIABLE DEPTH
- (5) AGGREGATE SHOULDERS, TYPE B SPECIAL
- (6) TYPE B6.12 CURB AND GUTTER (11" DEPTH)
- (7) AGGREGATE SUBGRADE, 12"
- (8) AGGREGATE SUBGRADE, VARIABLE DEPTH (UNDER CUTS)
- (9) STRUCTURAL EMBANKMENT (FURNISHED EXCAVATION)
- (10) TOPSOIL PLACEMENT, 4" / SEEDING / MULCH
- (11) TOPSOIL STRIPPING, 4"
- (12) MULTI-USE PATH (PCC SIDEWALK 5")
- (13) SUBBASE GRANULAR MATERIAL, TYPE B 4"
- (14) STRIP REFLECTIVE CRACK CONTROL TREATMENT (SYSTEM A)
- (15) FULL DEPTH SAW CUT (INCLUDED IN COST OF REMOVAL ITEM)
- (16) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- (17) SUBBASE GRANULAR MATERIAL, TYPE B 6"
- (18) HMA SHOULDERS, 3"
- (19) HMA SHOULDERS, 6"
- (20) 3/4", HMA LEVELING BINDER, N50
- (21) GEOTECHNICAL FABRIC

SOILS REPORT PAVEMENT CORE RESULTS

Sta. 12+96 bituminous concrete thickness = 8.8 Inches.
 Sta. 22+03 bituminous concrete thickness = 10.8 Inches.

SOILS REPORT RECOMMENDATIONS

Sta. 15+35 to BRIDGE: Undercut 12" and replace with 18" Agg. Subgrade.
 BRIDGE to Sta. 20+32: Undercut 12" and replace with 18" Agg. Subgrade.
 Sta. 20+32 to Sta. 23+50: No special treatment suggested.
 Undercut depths based on assumption that final subgrade will be about 1.5 feet below proposed road centerline elevation.

STRUCTURAL PAVEMENT DESIGN

STRUCTURAL DESIGN TRAFFIC: Year 2017
 PV = 16,320 SU = 340 MU = 340
 ROAD/STREET CLASSIFICATION: II
 PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 P = 96 S = 2 M = 2
 TRAFFIC FACTOR: Actual TF = 1.9 AC Type = HMA
 Minimum TF = NA
 PG GRADE: Surface = PG 64-22 Binder = PG 64-22
 SUBGRADE SUPPORT RATING:
 SSR = POOR

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE USE(S)	HMA SURFACE	HMA BINDER	HMA LEVELING BINDER	HMA SHOULDER	HMA BASE COURSE (DRIVEWAYS)	HMA SURFACE FOR DRIVEWAYS & PATH	TEMP. PAVEMENT STAGE 1 **	TEMPORARY RAMP	CLASS D PATCHES
PG GRADE	PG 64-22	PG 64-22	PG 64-22	PG 58-22	PG 58-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0 @ N50	4.0 @ N50	4.0 @ N50	3.0 @ N50	4.0 @ N50	4.0 @ N50	4.0 @ N50	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION:	IL 9.5 OR 12.5	IL 19.0	IL 9.5 OR 12.5	IL 9.5 OR 12.5	IL 19.0	IL 12.5 OR 19.0	IL 19.0	IL 19.0	IL 19.0
FRICTION AGGREGATE	MIXTURE D	N/A	N/A	N/A	N/A	MIXTURE C	MIXTURE D	MIXTURE D	MIXTURE D

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.

* IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

** IF CONTRACTOR CHOOSES TO USE CONCRETE FOR TEMPORARY PAVEMENT THE THICKNESS SHALL BE 10 INCHES.

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USER NAME = #USER#	DESIGNED - DPB	REVISED -
PLOT SCALE =	DRAWN - NDP	REVISED -
PLOT DATE = 7/6/2011	CHECKED - SBP	REVISED -
	DATE - 7/8/11	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
 PROPOSED

SCALE: SHEET NO. 20 OF 88 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5355	04-00167-00-BR	DEKALB	88	20
CONTRACT NO. 87491				
FED. ROAD DIST. NO. 3 ILLINOIS FED. AID PROJECT				