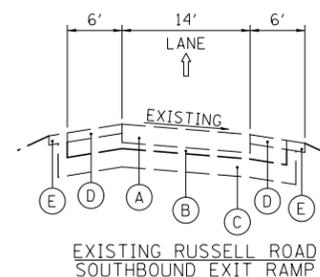
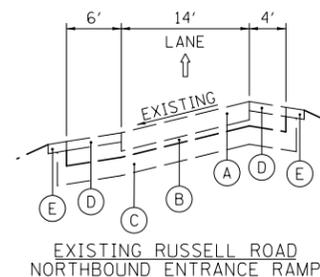
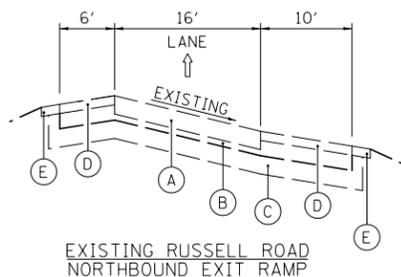
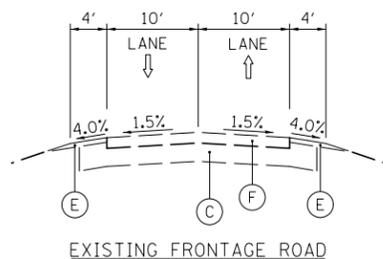


**EXISTING LEGEND**

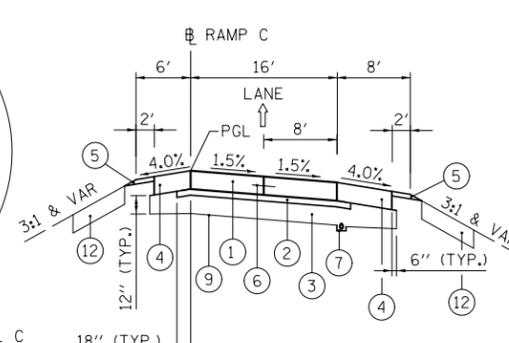
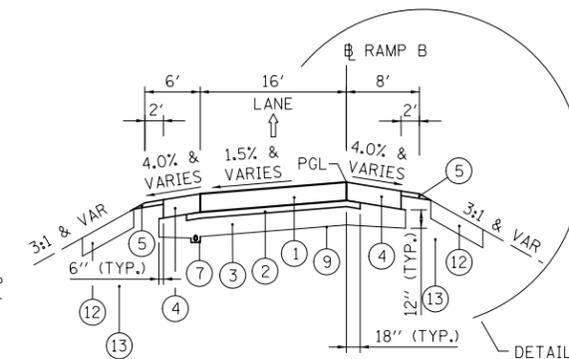
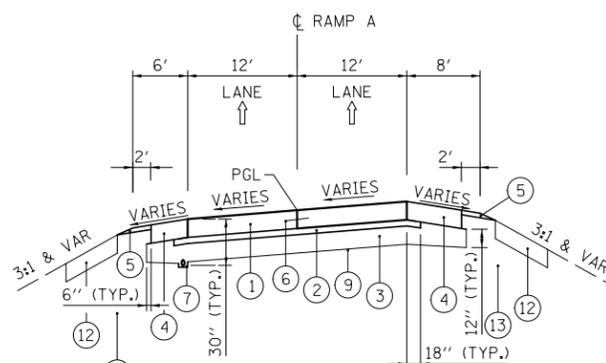
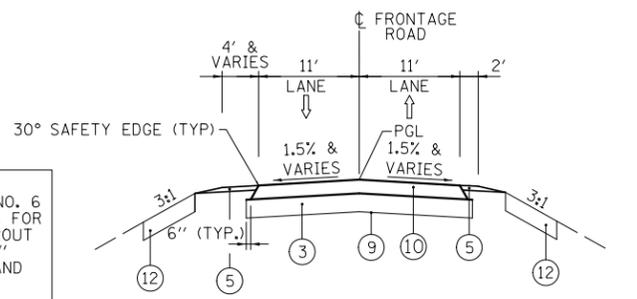
- (A) EXISTING P.C.C. PAVEMENT, 10"
- (B) EXISTING STABILIZED SUB-BASE, 4"
- (C) EXISTING AGGREGATE SUB-GRADE, 12"
- (D) EXISTING BITUMINOUS CONCRETE SHOULDER, 3"
- (E) EXISTING AGGREGATE SHOULDER (TYPICAL)
- (F) EXISTING AGGREGATE BASE COURSE WITH BITUMINOUS SURFACE TREATMENT, 7"

**PROPOSED LEGEND**

- (1) P.C.C. PAVEMENT, 12" (JOINTED)
- (2) STABILIZED SUB-BASE - HOT-MIX ASPHALT 4 1/2"
- (3) AGGREGATE SUB-GRADE IMPROVEMENT, 12"
- (4) PORTLAND CEMENT CONCRETE SHOULDERS, 12"
- (5) AGGREGATE SHOULDERS, 6" TYPE B
- (6) LONGITUDINAL SAWED OR CONSTRUCTION JOINT. FOR LONGITUDINAL SAWED JOINT, POUR IN PLACE NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 30" C-C. FOR LONGITUDINAL CONSTRUCTION JOINT, DRILL AND GROUT NO. 8 DEFORMED EPOXY TIE BARS 24" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE PAVEMENT, 12" (JOINTED))
- (7) PIPE UNDERDRAIN, 4"
- (8) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS
- (9) GEOTECHNICAL FABRIC
- (10) HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 9" - 2" HMA SURFACE COURSE, MIX "D", N70 - 7" HMA BINDER COURSE, IL 19.0, N70
- (11) HOT-MIX ASPHALT STABILIZATION 6' AT STEEL PLATE BEAM GUARDRAIL
- (12) TOPSOIL EXCAVATION AND PLACEMENT (1')
- (13) POROUS GRANULAR EMBANKMENT, SUBGRADE \*\*



**EXISTING CONDITIONS**

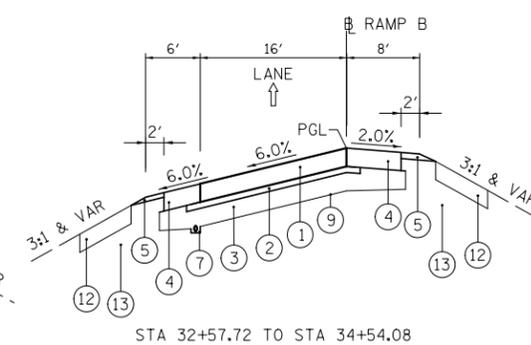
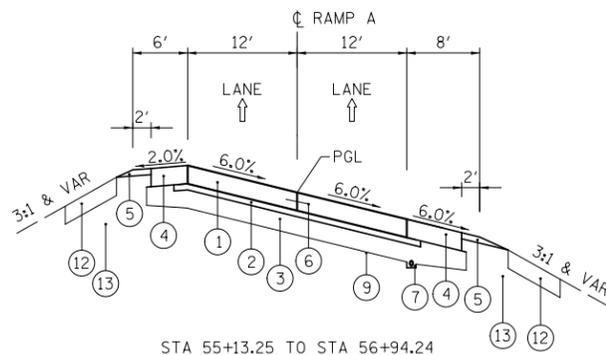
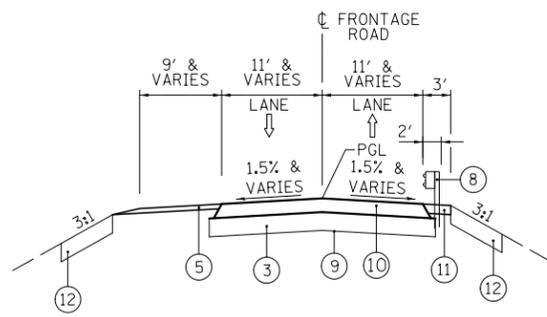


**PROPOSED FRONTAGE ROAD \***  
 STA 71+75.50 TO STA 72+96.91  
 SUPER ELEVATED RIGHT +4.6% FROM STA 72+96.91 TO 74+93.77  
 STA 74+93.77 TO STA 75+41.50

**PROPOSED RUSSELL ROAD NORTHBOUND EXIT RAMP (RAMP A)**  
 STA 53+80 TO STA 55+13.25  
 STA 56+94.24 TO STA 60+18.04  
 STA 60+44.96 TO STA 61+47.24

**PROPOSED RUSSELL ROAD NORTHBOUND ENTRANCE RAMP (RAMP B)**  
 STA 32+12.57 TO STA 32+57.72  
 STA 34+54.08 TO STA 37+65.16

**PROPOSED RUSSELL ROAD SOUTHBOUND EXIT RAMP (RAMP C)**  
 STA 54+00 TO STA 57+97.96



**FRONTAGE ROAD - STRUCTURAL PAVEMENT DESIGN BLOCK**

STRUCTURAL DESIGN TRAFFIC:	YEAR 2021
PV=	SU= MU=
ROAD/STREET CLASSIFICATION:	CLASS
P= 50%	S= 50% M= 50%
TRAFFIC FACTOR:	ACTUAL TF= 2.3 AC TYPE= N/A
	MINIMUM TF= NONE
SUBGRADE SUPPORT RATING:	SSR= POOR

STA 75+41.50 TO STA 76+48.88  
 SUPER ELEVATED LEFT -4.6% FROM STA 76+48.88 TO 78+83.09  
 STA 78+83.09 TO STA 79+84.72

STA 55+13.25 TO STA 56+94.24

STA 32+57.72 TO STA 34+54.08

\* PAVEMENT TAPERS FROM 20' TO 22' FROM STA 71+75.50 TO 72+36.50

\*\* POROUS GRANULAR EMBANKMENT, SUBGRADE TO BE USED AS EMBANKMENT ON RAMPS A AND B TO MEET STAGING REQUIREMENTS.

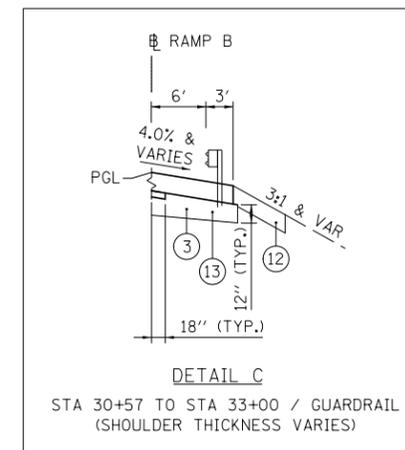
**I-94 RAMPS - STRUCTURAL PAVEMENT DESIGN BLOCK**

STRUCTURAL DESIGN TRAFFIC:	YEAR 2021
PV= 2,663	SU= 380 MU= 761
ROAD/STREET CLASSIFICATION:	CLASS I
P= 50%	S= 50% M= 50%
TRAFFIC FACTOR:	ACTUAL TF= 5.85 AC TYPE= N/A
	MINIMUM TF= 11.17
SUBGRADE SUPPORT RATING:	SSR= POOR

NOTE: THE RAMPS ON THIS PROJECT WERE DESIGNED TO MATCH THE MAINLINE PAVEMENT.

NOTE: PLACE TIE BARS BETWEEN THE P.C.C. PAVEMENT, 12" (JOINTED) AND THE PORTLAND CEMENT CONCRETE SHOULDERS, 12" AS FOLLOWS:

LONGITUDINAL CONSTRUCTION JOINT. DRILL AND GROUT NO. 6 DEFORMED EPOXY TIE BARS 30" LONG AT 24" C-C. (SHALL BE INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE SHOULDERS, 12")



**PROPOSED CONDITIONS**

**BOWMAN, BARRETT & ASSOCIATES INC.**  
 CONSULTING ENGINEERS  
 Chicago, Illinois  
 312.228.0100  
 www.bbandainc.com

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		CHECKED - RGR	REVISED -
		DATE - 03/09/2012	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	49-1(HB & HB-1R)	LAKE	225	10
CONTRACT NO. 60L76				
ILLINOIS FED. AID PROJECT				

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