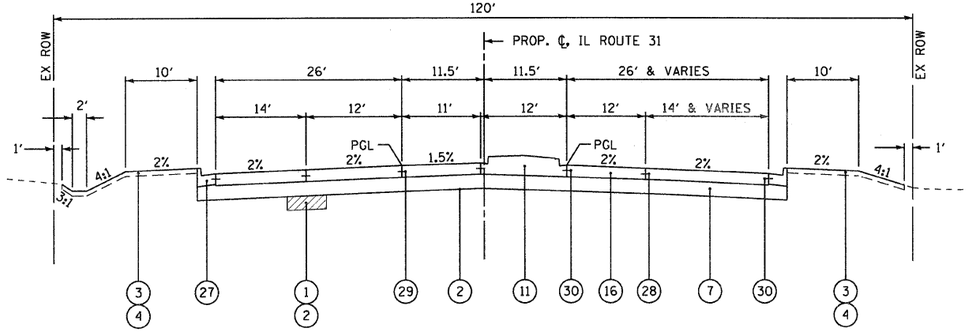
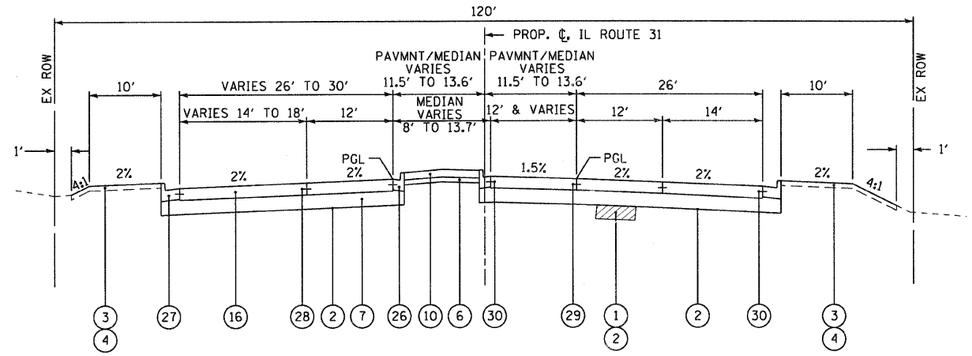
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
336	112R-N	McHENRY	266	15
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 62537



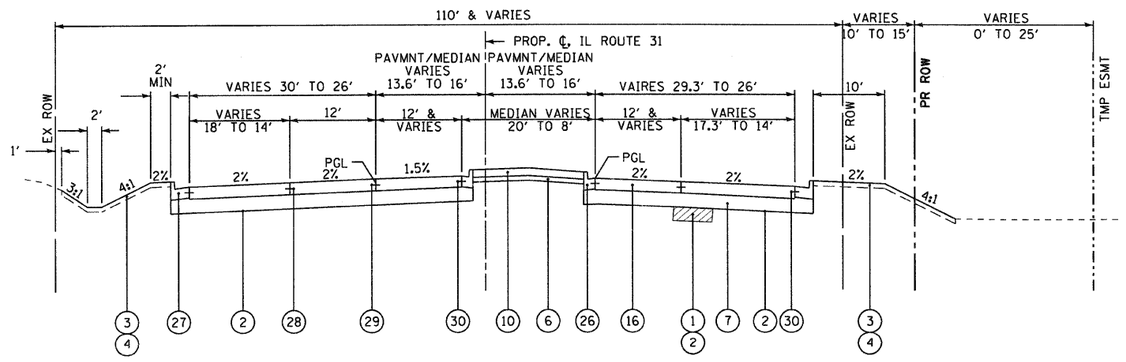
PROPOSED TYPICAL SECTION - IL ROUTE 31

STA. 109+17.20 TO STA. 111+59.72



PROPOSED TYPICAL SECTION - IL ROUTE 31

STA. 111+59.72 TO STA. 114+30.00



PROPOSED TYPICAL SECTION - IL ROUTE 31

STA. 114+30.00 TO STA. 117+76.74

LEGEND

1. POROUS GRANULAR EMBANKMENT, SUBGRADE (AT LOCATIONS SPECIFIED PER THE SOILS NOTE ON SHEET 15 OR AT LOCATIONS DESIGNATED BY THE ENGINEER) (EXCAVATION PAID FOR PER APPLICABLE EARTHWORK PAY ITEM)
2. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION (AT LOCATIONS SPECIFIED PER THE SOILS NOTE ON SHEET 15 OR AT LOCATIONS DESIGNATED BY THE ENGINEER)
3. TOPSOIL FURNISH AND PLACE, 4"
4. SEEDING OR SODDING, SALT TOLERANT (SEE LANDSCAPING PLANS)
5. SUB-BASE GRANULAR MATERIAL, TYPE B 2" (COST INCLUDED IN P.C.C. SIDEWALK 5")
6. SUB-BASE GRANULAR MATERIAL, TYPE B 4"
7. AGGREGATE SUBGRADE IMPROVEMENT, 12"
8. AGGREGATE SHOULDERS, TYPE B, 8"
9. SUB-BASE GRANULAR MATERIAL, TYPE C (COST INCLUDED IN AGGREGATE SUBGRADE IMPROVEMENT, 12")
10. CONCRETE MEDIAN SURFACE 4"
11. CONCRETE MEDIAN, TYPE SB-6.12
12. STABILIZED MEDIAN (HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2") (HOT-MIX ASPHALT BASE COURSE, 8")
13. NOT USED
14. CLASS D PATCHES, 4" (AT LOCATIONS DESIGNATED BY THE ENGINEER)
15. CLASS D PATCHES, 10" (AT LOCATIONS DESIGNATED BY THE ENGINEER)
16. PORTLAND CEMENT CONCRETE PAVEMENT 9 ¾" (JOINTED)
17. HOT-MIX ASPHALT BASE COURSE WIDENING, 9 ½" (IN THREE LIFTS)
18. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1 ½"
19. POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1 ¾ "
20. HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2 ¼"
21. LEVELING BINDER (MACHINE METHOD), N70, VARIABLE DEPTH (2 ¼" MAXIMUM THICKNESS)
22. POLYMERIZED LEVELING BINDER (MACHINE METHOD, IL-4.75, N50, ¾"
23. HOT-MIX ASPHALT SHOULDERS, 8"
24. PORTLAND CEMENT CONCRETE SIDEWALK, 5"
25. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.12
26. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
27. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
28. SAWED LONGITUDINAL JOINT WITH 30" LONG DEFORMED EPOXY-COATED NO. 6 TIE BARS @ 30" CTS.
29. LONGITUDINAL CONSTRUCTION JOINT WITH 24" LONG GROUTED IN PLACE DEFORMED EPOXY-COATED NO. 8 TIE BARS @ 24" CTS.
30. 24" LONG DEFORMED EPOXY-COATED NO. 6 TIE BARS @ 24" CTS. GROUTED IN PLACE
31. POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2 ¼"
32. POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, VARIABLE DEPTH (2 ¼" MINIMUM THICKNESS)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @Ndes
TERRA COTTA AVENUE	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 1½" (IL-9.5mm)	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19, N50, 2¼"	4% @ 50 Gyr.
PAVEMENT RESURFACING/WIDENING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "F", N90, 1¾" (IL-9.5mm)	4% @ 90 Gyr.
POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90, 2½" & VARIABLE DEPTH	4% @ 90 Gyr.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, ¾"	3.5% @ 50 Gyr.
LEVELING BINDER (MACHINE METHOD) N70, VARIABLE DEPTH (IL-9.5mm)	4% @ 70 Gyr.
HOT-MIX ASPHALT BASE COURSE WIDENING, 9½" (HMA BINDER IL-19mm) (3 LIFTS)	4% @ 90 Gyr.
DRIVEWAYS	
HOT-MIX ASPHALT BASE COURSE, 6" & 8" (2 LIFTS)	4% @ 50 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm)	4% @ 50 Gyr.
PATCHING	
CLASS D PATCHES, 4" (2 LIFTS) & 10" (3 LIFTS) (HMA BINDER IL-19mm)	4% @ 70 Gyr.
SHOULDERS	
HOT-MIX ASPHALT SHOULDERS, 8" (HMA BINDER IL-19mm) (2 LIFTS)	4% @ 50 Gyr.
MEDIAN	
HOT-MIX ASPHALT BASE COURSE, 8" (2 LIFTS)	4% @ 50 Gyr.
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm)	4% @ 50 Gyr.
TEMPORARY PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2" (IL-9.5mm)	4% @ 50 Gyr.
HOT-MIX ASPHALT BASE COURSE, 10" (HMA BINDER IL-19mm) (3 LIFTS)	4% @ 50 Gyr.
TEMPORARY RAMPS	
LEVELING BINDER (HAND METHOD), N50 (IL-9.5mm)	4% @ 50 Gyr.

NOTES:

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

2) THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" 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) MILLING SHALL BE DONE PRIOR TO PATCHING

STRUCTURAL DESIGN TRAFFIC: Year 2019

PV = 31,685 SU = 1,491 MU = 1,491

ROAD/STREET CLASSIFICATION: Class 1

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:

P = 32 S = 45 MU = 45

TRAFFIC FACTOR: Actual TF = 11.30 AC Type = N/A

Minimum TF = 6.03

AC GRADE Binder = PG 64-22 Surface = PG 64-22

SUBGRADE SUPPORT RATING:

SSR = POOR (Sta._____ to Sta. _____)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.P. ROUTE 336
IL RTE 31 AND IL RTE 176

PROPOSED TYPICAL SECTIONS
ILLINOIS ROUTE 31

SCALE: NTS DRAWN BY: SMP

DATE: 02/10/2012 CHECKED BY: BDH

PLAN / PROFILE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
PROFILE CHECKED
NOTE BOOK
NO.
BY
DATE
STRUCTURE NOTATIONS GIVEN
CADD FILE NAME