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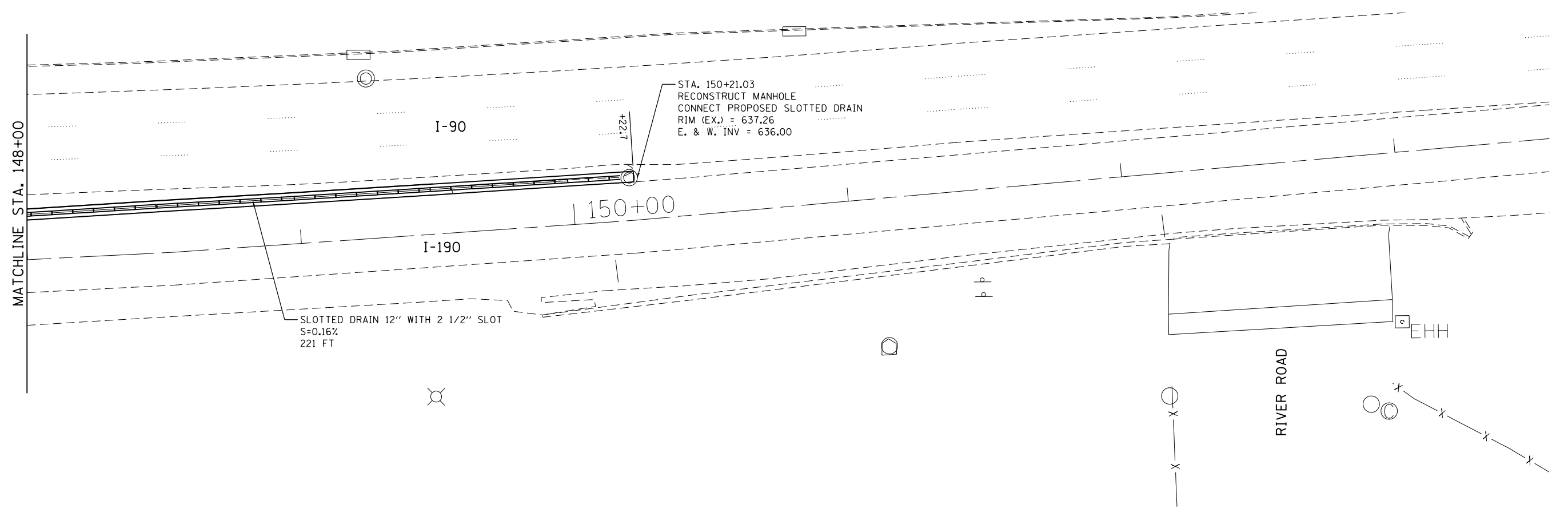
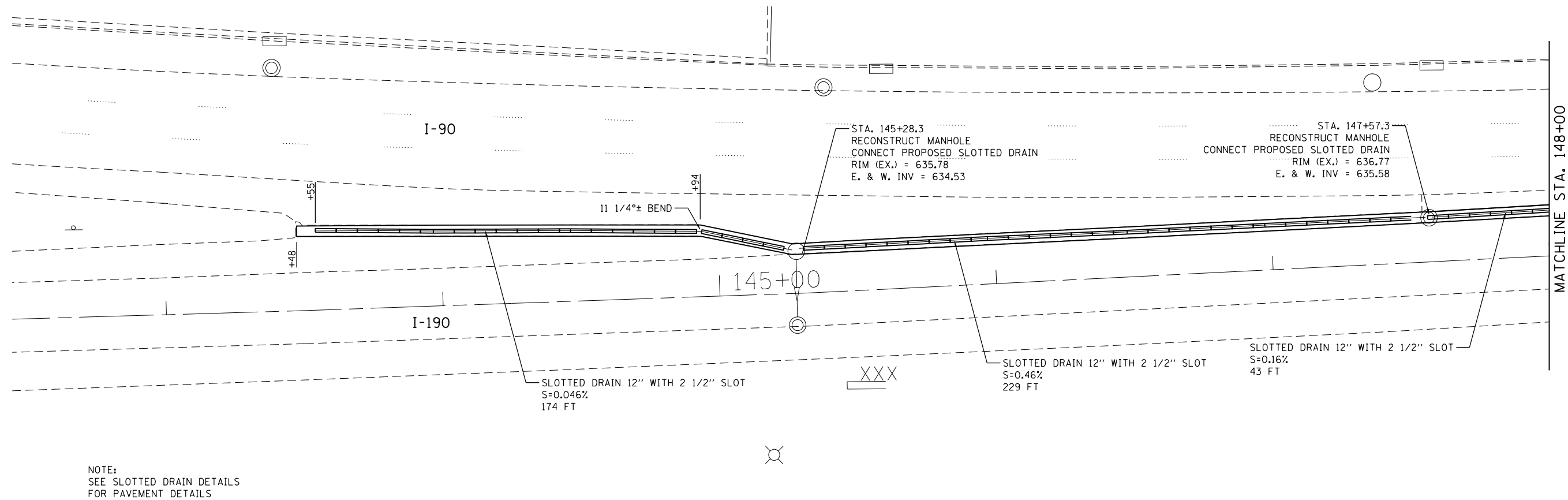
GRAEF 8501 N. Higgins Road, Suite 280
 Chicago, Illinois 60631
 (773) 399-0112

USER NAME = 1485	DESIGNED - EF	REVISED -
DRAWN - EF	CHECKED - RS	REVISED -
PLOT SCALE = 48.000' / in.	DATE - 09/21/2012	REVISED -
PLOT DATE = 10/15/2012		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I-190 (O'HARE AIRPORT TO I-90)	
ROADWAY PLANS	
SCALE: 1"=20'	SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	(0101.6 & 0102.5)RS-2	COOK	85	29
CONTRACT NO. 60T33				
ILLINOIS FED. AID PROJECT				



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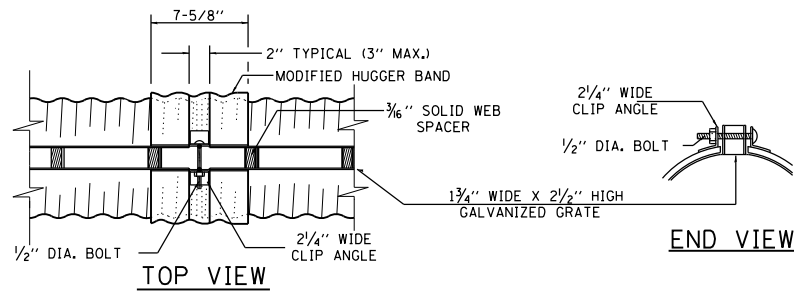
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**I-190 (O'HARE AIRPORT TO I-90)
PROPOSED SLOTTED DRAIN PLAN**

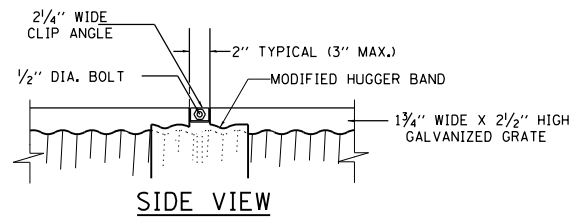
SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	(0101.6 & 0102.5)RS-2	COOK	85	30
CONTRACT NO. 60T33				

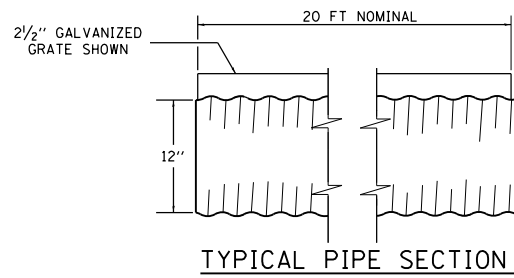
ILLINOIS FED. AID PROJECT



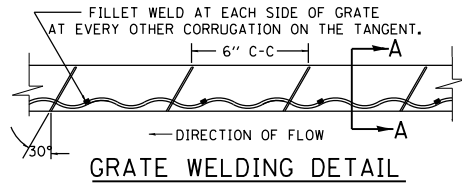
END VIEW



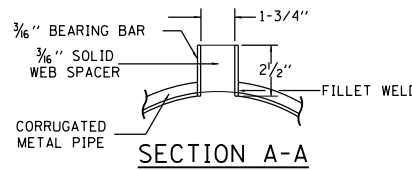
SIDE VIEW



TYPICAL PIPE SECTION



GRATE WELDING DETAIL



SECTION A-A

NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

THE SLOTTED DRAIN SHALL BE CORRUGATED PIPE CULVERT WITH INTEGRAL SLOTTED DRAINS. BEFORE PLACING THE CONCRETE ADJACENT TO THE PIPE, THE SLOT SHALL BE COVERED BY EITHER THIN, FLAT METAL SHEETING OR BY A BOARD NOTCHED TO FIT OVER THE GRATE BARS. THIS COVERING MUST FIT CLOSELY IN THE SLOT TO PREVENT ENTRY OF CONCRETE INTO THE PIPE.

PAVING OVER THE SLOTTED DRAIN WILL THEN BE ONE CONTINUOUS OPERATION OVER THE PROTECTED DRAIN. THE PROTECTION FOR THE DRAIN SLOT SHALL THEN BE REMOVED. THE PIPE SHALL DRAIN INTO THE SIDE OF THE INLET.

THE OPENING WHERE THE SLOT IS REMOVED SHALL BE COVERED TO PREVENT CONCRETE FROM ENTERING THE PIPE.

THE CORRUGATED STEEL PIPE USED IN THE SLOTTED DRAIN SHALL MEET THE REQUIREMENTS OF AASHTO M-36/ASTM A 760. THE CMP SHALL BE GALVANIZED OR ALUMINIZED STEEL TYPE 2. STEEL GRATING SHALL MEET THE GALVANIZING REQUIREMENTS OF AASHTO M-111. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLOTTED DRAIN PIPE, AND SHALL INCLUDE ELBOWS.

USE APPROVED END CAP TO PREVENT CONCRETE ENTRY INTO THE PIPE DURING GUTTER CONSTRUCTION ON THE UPSTREAM END OF PIPE.

DIMENSIONS ARE SUBJECT TO THE FOLLOWING MANUFACTURING TOLERANCES:

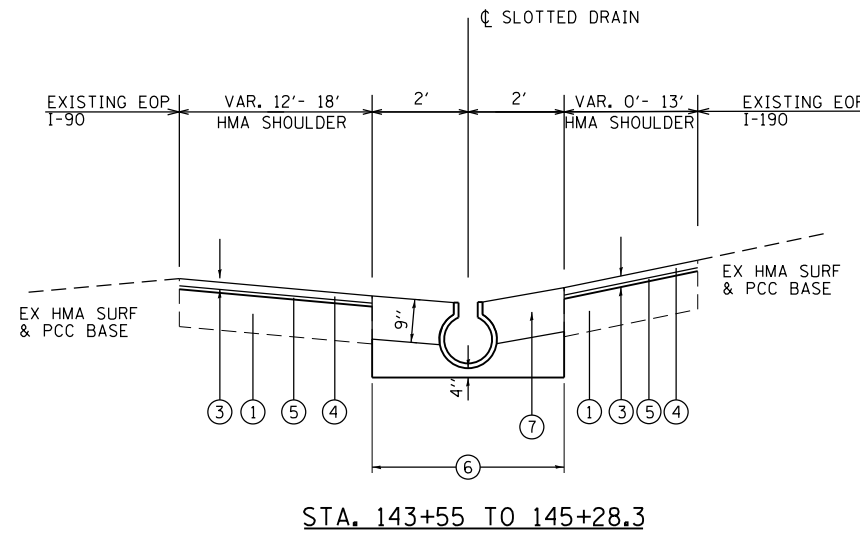
1. VERTICAL BOW $\pm 3/8$ "
2. HORIZONTAL BOW $\pm 9/8$ "
3. TWIST $\pm 1/2$ "

THE REMOVAL OF THE EXISTING SLOTTED DRAIN SHALL BE INCLUDED IN THE COST OF THE PAVEMENT REMOVAL

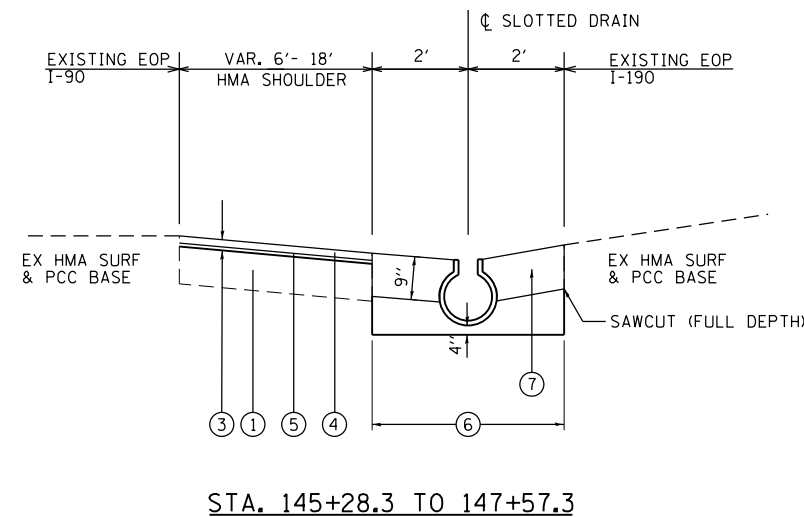
THE 4" AGGREGATE BASE COURSE MATERIAL TYPE B AND 9" PCC GUTTER ARE INCLUDED IN THE COST OF THE SLOTTED DRAIN.

ALL TRAFFIC CONTROL DEVICES AND ADVANCED SIGNING FOR THE PROPOSED SLOTTED DRAIN WORK SHALL BE PLACED ACCORDING TO STATE HIGHWAY STANDARDS 701400 AND 701401.

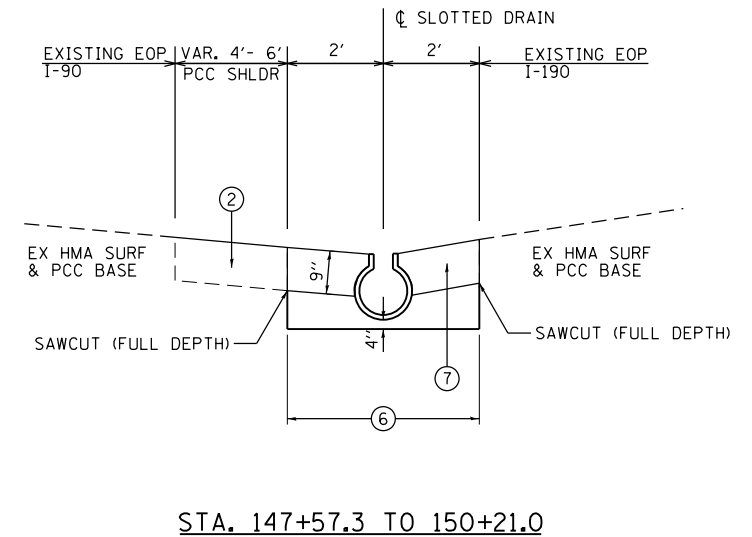
ALL SLOTTED DRAIN WORK SHALL BE PERFORMED DURING NIGHTTIME HOURS AS OUTLINED IN THE SPECIAL PROVISIONS. DURING DAYTIME HOURS, ALL OPEN HOLES SHALL BE COVERED WITH A STEEL PLATE AND THE GORE AREA SHALL BE BARRICADED. BOTH STEEL PLATES AND BARRICADES SHALL BE INSTALLED PER THE SATISFACTION OF THE ENGINEER. THE COST OF THE STEEL PLATE AND ALL TRAFFIC CONTROL DEVICES SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAY).



STA. 143+55 TO 145+28.3



STA. 145+28.3 TO 147+57.3



STA. 147+57.3 TO 150+21.0

LEGEND

- ① EXISTING HMA SHOULDER
- ② EXISTING PCC SHOULDER
- ③ PROP. HOT-MIX ASHAPLT SURFACE REMOVAL, VARIABLE DEPTH
- ④ PROP. HMA SURFACE COURSE, MIX "D", N70, 1 1/2"
- ⑤ PROP. HMA BINDER COURSE, IL 19.0, N70, 2 1/4"
- ⑥ 12" SLOTTED DRAIN INCLUDING A 4" AGGREGATE BASE COURSE MATERIAL TYPE B
- ⑦ 9" PCC GUTTER

PROPOSED SLOTTED DRAIN GRADES

STATION	I-90 EOP EXISTING	I-90 EDGE SD		SLOTTED DRAIN		I-90 EDGE SD		I-90 EOP EXISTING	NOTES
		EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED		
143+48.0	636.11	635.96				636.01		636.26	BEGIN CONCRETE
143+55.0	636.08	635.92	635.94	635.86	635.88	635.98	635.99	636.27	BEGIN SLOTTED DRAIN
144+00.0	635.89	635.90	635.86	635.71	635.86	635.79	635.92	636.32	
144+50.0	635.92	635.77	635.85	635.76	635.84	635.88	635.92	636.39	
144+94.0	636.05	635.84	635.87	635.73	635.82	635.93	635.92	636.48	11 1/4 DEGREE BAND
145+00.0	636.06	635.84	635.87	635.74	635.81	635.92	635.90	636.49	
145+28.3	636.11	635.98	635.98	635.76	635.80	635.89	635.87	636.49	RECONSTRUCT MANHOLE
145+50.0		636.15		636.04	635.90	636.09	635.98	636.65	
146+00.0		636.29		636.33	636.12	636.35	636.21	636.76	
146+50.0		636.54		636.55	636.35	636.51	636.42	636.81	
147+00.0		636.66		636.64	636.57	636.69	636.62	636.85	
147+50.0		636.87		636.79	636.80	636.83	636.84	636.98	
147+57.3		636.89		636.81	636.83	636.85		637.00	RECONSTRUCT MANHOLE
148+00.0		637.04		636.89	636.90	636.93		637.04	
148+50.0		637.12		637.07	636.98	637.07		637.06	
149+00.0		637.22		637.22	637.06	637.21		637.20	
149+50.0		637.33		637.32	637.14	637.32		637.31	
150+00.0		637.41		637.24	637.22	637.25		637.27	
150+21.0				637.26					RECONSTRUCT MANHOLE

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