

INDEX OF SHEETS

SHEET NUMBER	DESCRIPTION
1	COVER SHEET -- LOCATION MAP
2	SUMMARY OF QUANTITIES, GENERAL NOTES, MIXTURE TABLE, AND BUTT JOINTS
3 & 4	TYPICAL X-SECTIONS
5	TYPICAL ENTRANCES, SIDE ROAD INTERSECTIONS, AND MAIL BOX TURNOUTS
6	EARTH EXCAVATION & HMA SHOULDERS PLAN VIEW
7	EARTH EX, HMA SHOULDERS, STRIPING, HMA BUTT JOINT QUANTITY TABLES & SUPER ELEVATION DATA

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 334	09-00301-00-RS	IROQUOIS	7	1
JOB C-93-025-14			PROJECT RS-0334(114)	

CONTRACT 87578

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

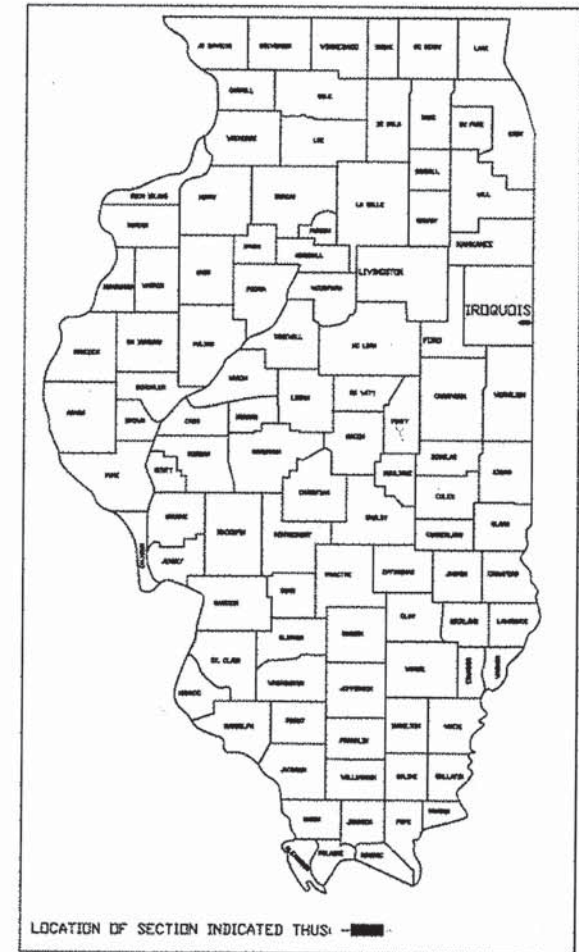
**PLANS FOR PROPOSED IMPROVEMENT OF
FEDERAL AID SECONDARY HIGHWAY 334**

SURFACE TRANSPORTATION PROGRAM - RURAL

**FAS ROUTE 334 (CH 9)
SECTION: 09-00301-00-RS
PROJECT NO. RS-0334(114)
"HMA RESURFACING PROJECT"
IROQUOIS COUNTY
JOB NO. C-93-025-14**

ILLINOIS HIGHWAY STANDARD DRAWINGS

000001-06	SYMBOLS AND ABBREVIATIONS
701301-04	LANE CLOSURE, 2L 2W, SHORT TIME OPERATION, FOR SPEEDS > 45 MPH
701306-03	LANE CLOSURE, 2L 2W, SLOW MOVING DAY ONLY OPERATION, FOR SPEEDS > 45 MPH
701901-03	TRAFFIC CONTROL DEVICES
780001-04	TYPICAL PAVEMENT MARKINGS
BLR 24-2	MAILBOX TURNOUT



LOCATION OF SECTION INDICATED THUS:

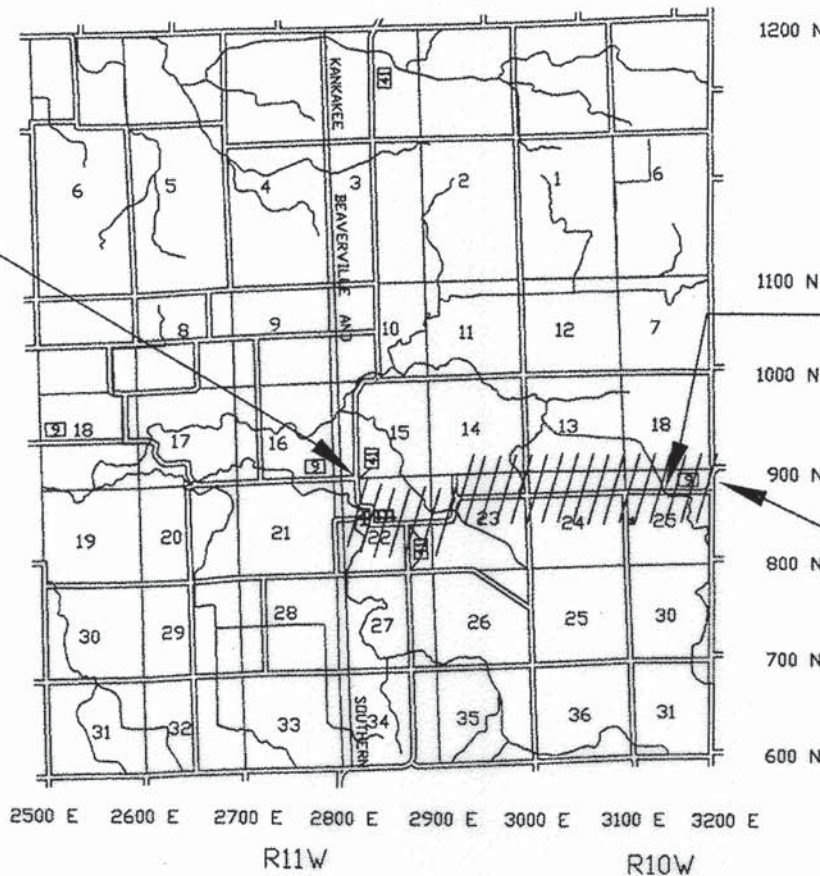
MAJOR COLLECTOR 2009 ADT = 400
PV = 88% SU = 7% MU = 5%
DESIGN SPEED = 50 M. P. H.



"THESE PLAN WERE PREPARED BY ME OR BY A FULL TIME MEMBER OF MY STAFF WORKING UNDER MY DIRECT SUPERVISION"

Joel V. Moore
JOEL V. MOORE, COUNTY ENGINEER
ILL. REG. PROF. ENG. #62056831
DATE EXPIRES: 11/30/15

PROJECT ENDS
STA 240+50



BRIDGE OMISSION
STA 39+28 TO 40+31
S.N. 038-5513

PROJECT BEGINS
STA 7+50

GROSS LENGTH OF SECTION: = 23,300.00 FT. = 4.413 MI.
OMISSION LENGTH = 103.0 FT. = .020 MI.
NET LENGTH OF SECTION: = 23,197.00 FT. = 4.393 MI.



NOTES:

1. JULIE # 1-800-892-0123

KNOWN UTILITIES
EASTERN ILLINI ELECTRIC CO-OP
VERIZON
AMEREN CIPS

CONTRACT 87578

CONTRACT 87578

Approved March 3, 2014
Joel V. Moore
County Engineer

Passed 3/10, 2014
Paula Lister
DISTRICT THREE LOCAL ROADS AND STREETS ENGINEER
RELEASED FOR BID
BASED ON LIMITED
REVIEW 3/10, 2014
Paula Lister
DEPUTY DIRECTOR OF HIGHWAYS, REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			FUND CODE	0005
ITEM #	PAY ITEM #	PAY ITEM	UNIT	QUANTITY
* 1	X4060110	BITUMINOUS MATERIALS (PRIME COAT)	LBS	40,000
* 2	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
* 3	20200500	EARTH EXCAVATION WIDENING	CU YD	338
4	40600627	LEVEL BINDER (MACHINE METHOD), IL-9.5FG, N50	TON	5,400
* 5	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	859
6	40600990	TEMPORARY RAMP	SQ YD	67
7	40603310	HOT-MIX ASPHALT SURFACE COURSE MIX 'C' N50	TON	5,100
* 8	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	296
* 9	44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2'	SQ YD	556
*10	44201723	CLASS D PATCHES, TYPE IV, 6 INCH	SQ YD	400
*11	48101200	AGGREGATE SHOULDERS, TYPE B	TON	5,000
*12	48203100	HOT-MIX ASPHALT SHOULDERS	TON	683
13	67100100	MOBILIZATION	L SUM	1
14	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	4,660
15	70300220	TEMPORARY PAVEMENT MARKING - LINE 4'	FOOT	17,954
16	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	777
Δ 17	78001110	PAINT PAVEMENT MARKING - LINE 4'	FOOT	17,954

* SEE SPECIAL PROVISIONS
 Δ SPECIALTY ITEMS

GENERAL NOTES

THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE TYPICAL X-SECTION IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.

FOR ALL PAVEMENT MARKINGS ON FINAL SURFACES (I.E., MAINLINE PAVEMENT), ONLY TEMPORARY PAVEMENT MARKING TAPE SHALL BE USED.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUALITIES:		
GRANULAR MATERIALS	2.05	TONS/CU YD
BITUMINOUS MATERIALS PRIME COAT	0.05/.025	LBS/SQ FT
HOT MIX ASPHALT SURFACE COURSE	112	LBS/SQ YD/INCH
LEVELING BINDER (MM), IL. 9.5FG, N50	112	LBS/SQ YD/INCH
BINDER COURSE, IL. 19.0FG, N50	112	LBS/SQ YD/INCH
SHORT TERM PAVEMENT MARKING	4	FT/40 FT OF APPLICATION
PAINT PAVEMENT MARKING - LINE 4'	10	FT/40 FT OF APPLICATION

PAVEMENT DESIGN - CH 9

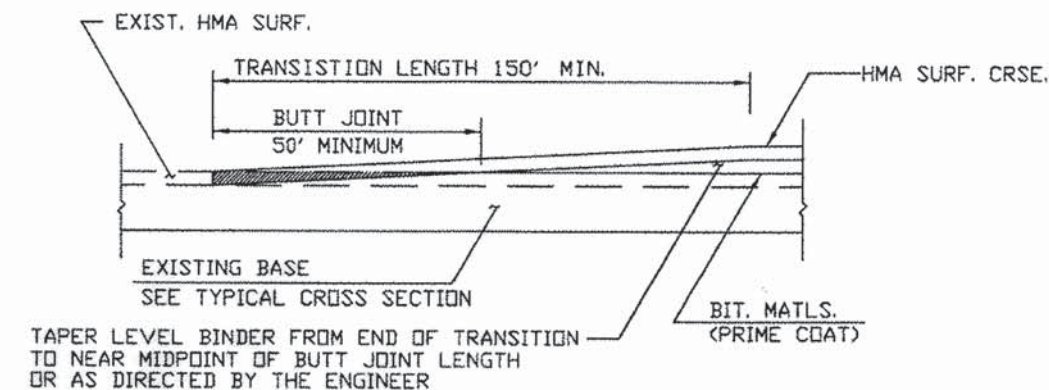
STRUCTURAL DESIGN TRAFFIC: YEAR 2024
 PV= 528 (88%) SU= 42 (7%) MU= 30 (5%)
 ROAD CLASSIFICATION CLASS III
 TRAFFIC FACTOR: ACTUAL TF = 0.16 AC TYPE = PG 64-22
 MINIMUM TF = 1.79
 PG GRADE: BINDER = PG 64-22 SURFACE = PG 64-22
 SUB GRADE SUPPORT RATING:
 IBR = 2.0 (STA. 7+50 TO 240+50)

MIXTURE TABLE

	HMA SHOULDER BOTTOM 6"	HMA LEVEL BINDER	HMA SURFACE	HMA BINDER FOR PATCHES
PG GRADE	PG64-22	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL 19.0FG	IL 9.5 FG	IL 9.5	IL 19.0FG
FRICTION AGGREGATE			MIXTURE C	
DENSITY TEST METHOD	*CORES/NUCLEAR	CORES/NUCLEAR	CORES/NUCLEAR	CORES

*MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

HMA SURFACE REMOVAL BUTT JOINT DETAIL



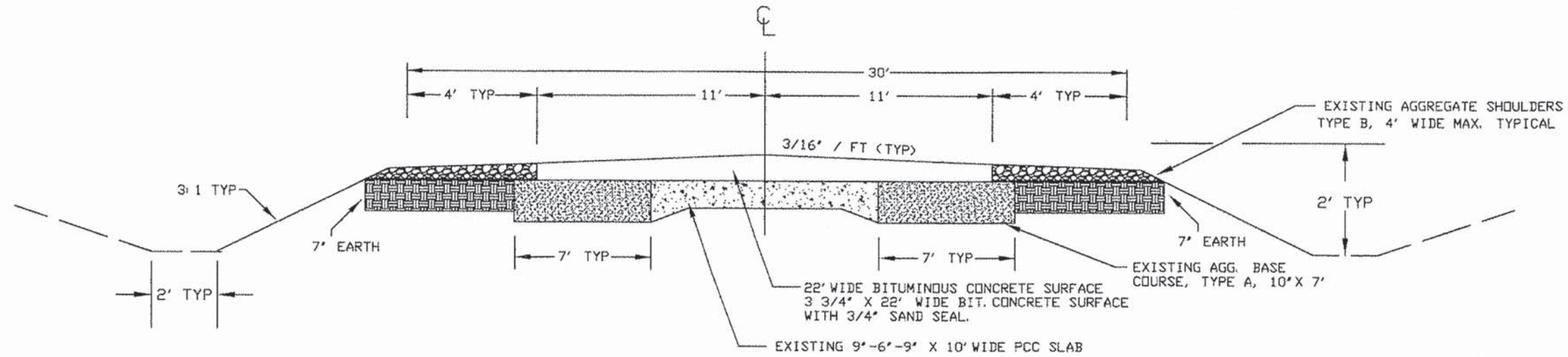
SECTION NOTES

THE PROPOSED IMPROVEMENT CONSISTS OF A HOT MIX ASPHALT SURFACE COURSE INCLUDING LEVELING BINDER, SHOULDER STONE AND ALL WORK NECESSARY TO COMPLETE THE PROJECT ACCORDING TO THE PLANS AND SPECIFICATIONS.

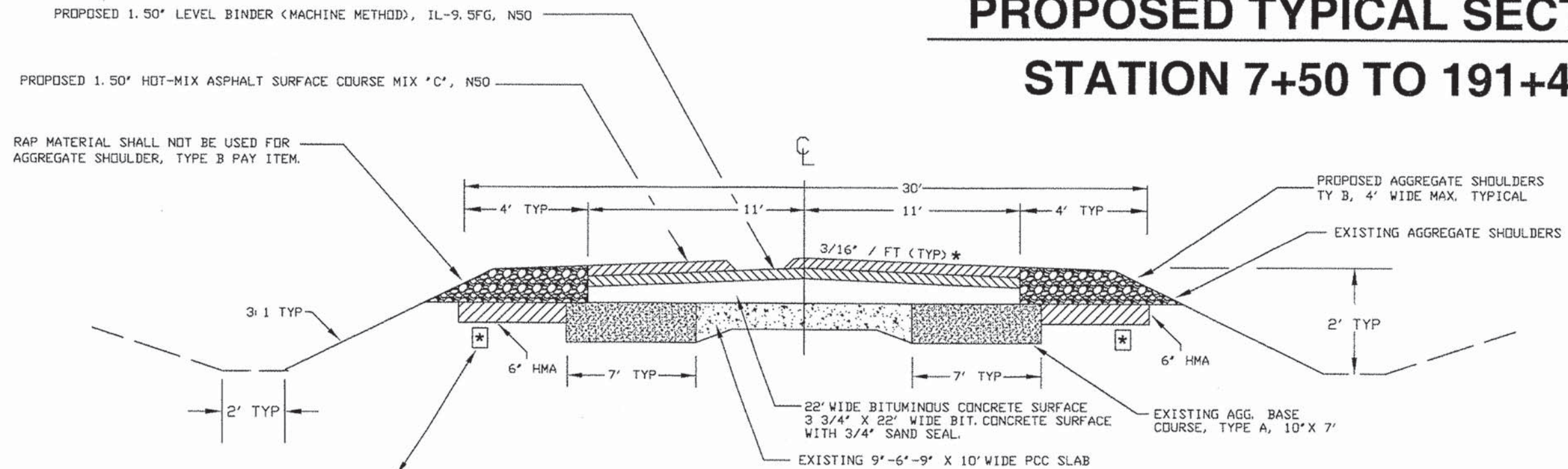
COUNTY HIGHWAY 9 IS A COMBINATION OF SECTIONS: (52-15D, 84 MFT, 189 MFT & 90-00000-01-GM)

ROUTE NO. FAS 334	SECTION 09-00301-00-RS	COUNTY IROQUOIS	TOTAL SHEETS 7	SHEET NO. 3
JOB C-93-025-14			PROJECT #: RS-0334 (114)	
CONTRACT 87578				

EXISTING TYPICAL SECTION STATION 7+50 TO 191+46



PROPOSED TYPICAL SECTION STATION 7+50 TO 191+46



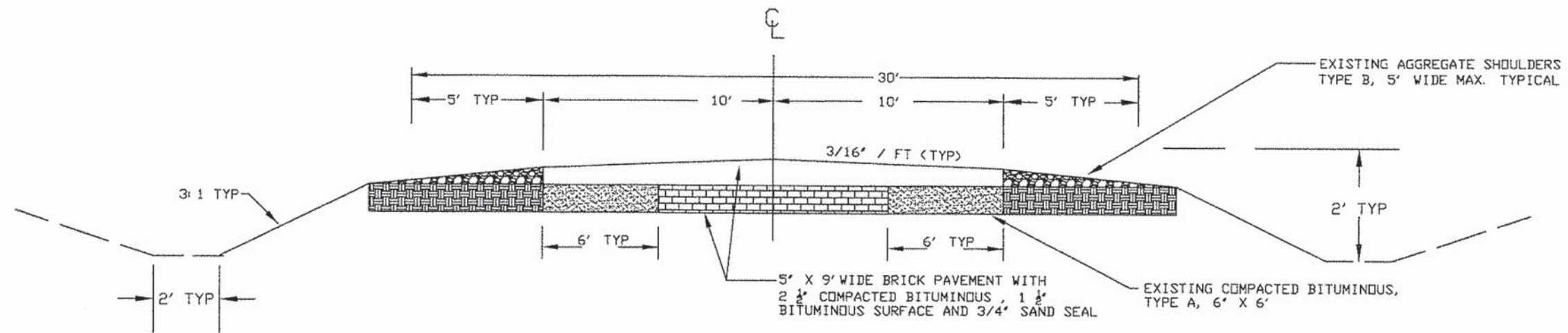
*** EXISTING BASE TO BE WIDENED 4'**

STATION 11+50 TO 17+50 RT
STATION 150+00 TO 156+00 LT
STATION 160+50 TO 167+50 RT

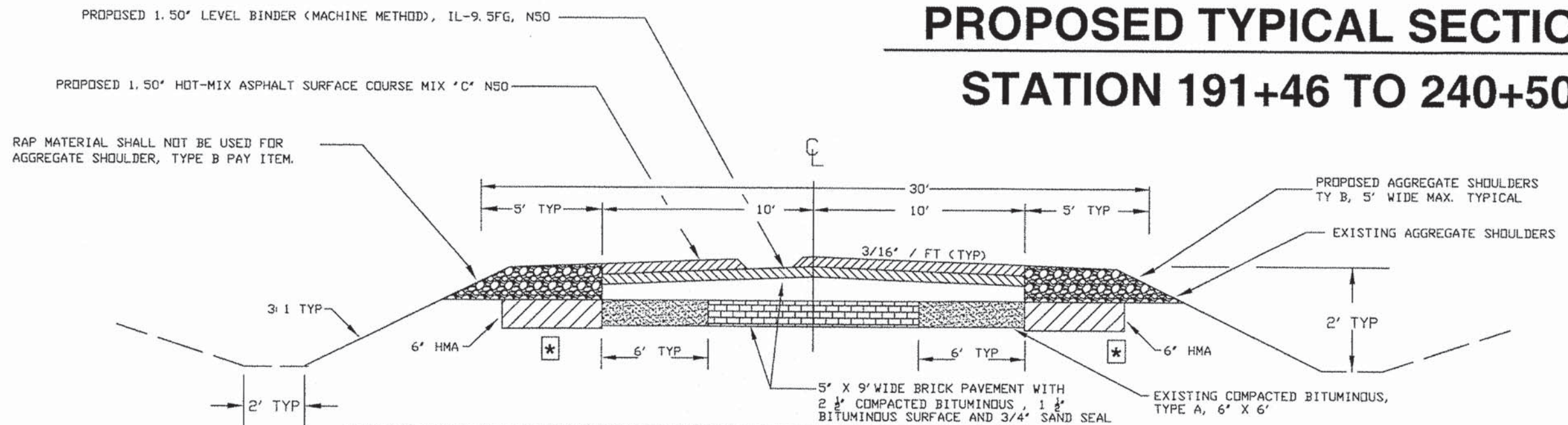
*** SUPER ELEVATION AT 6%**

STATION 10+76.86 TO 17+92.19
STATION 149+53.86 TO 156+66.34
STATION 161+02.36 TO 167+80.14

EXISTING TYPICAL SECTION STATION 191+46 TO 240+50



PROPOSED TYPICAL SECTION STATION 191+46 TO 240+50

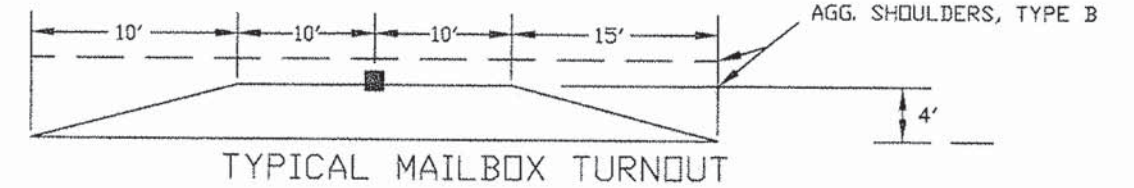


*** EXISTING BASE TO BE WIDENED 4'**

STATION 198+85 TO 199+50 LT	STATION 201+75 TO 203+50 RT	STATION 217+50 TO 220+50 LT
STATION 198+85 TO 199+60 RT	STATION 208+00 TO 209+40 LT	STATION 223+00 TO 229+00 RT
STATION 200+00 TO 204+40 LT	STATION 208+50 TO 210+50 RT	
STATION 200+35 TO 201+75 RT	STATION 209+60 TO 210+50 LT	

NOTE: ALL PRIVATE ENTRANCES, MAIL BOX TURNOUTS AND SIDE ROAD INTERSECTIONS SHALL BE PAID FOR AS INCIDENTAL HOT-MIX ASPHALT SURFACING = TOTAL 296 TON

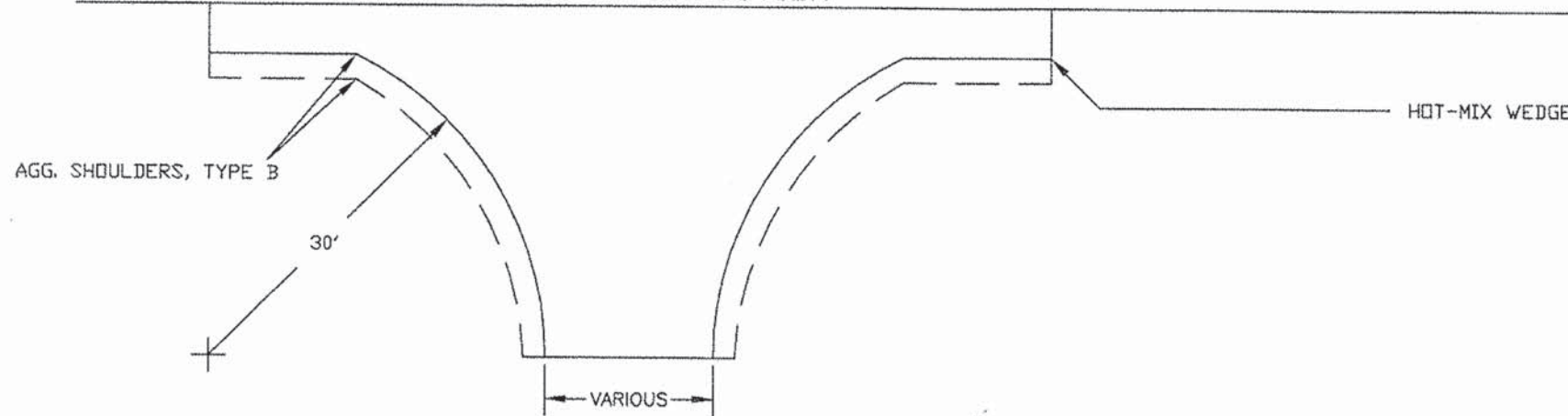
NOTE: AGGREGATE AROUND ALL PRIVATE ENTRANCES, MAIL BOX TURNOUTS AND SIDE ROAD INTERSECTIONS SHALL BE CONSIDERED INCIDENTAL TO AGGREGATE SHOULDERS, TYPE B AND PLACED AS DIRECTED BY THE ENGINEER.



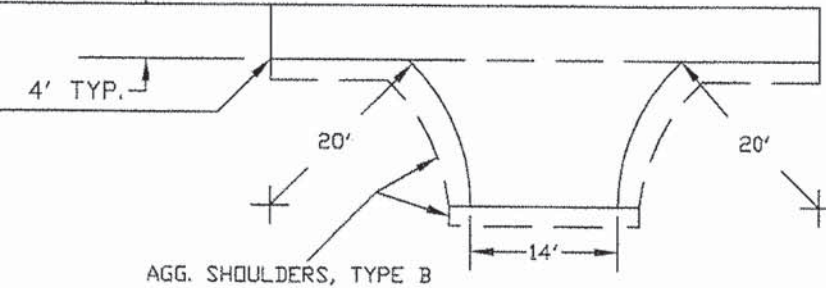
TYPICAL MAILBOX TURNOUT

☐ PAVEMENT

TYPICAL INTERSECTION



TYPICAL PRIVATE & FIELD ENTRANCES



TYPICAL FIELD ENTRANCES

TYPICAL INTERSECTION - SIDE ROADS

STATION	SIDE	WIDTH	SQ. YD.	TON
12+97 LT	880N / 3200E	70'	47	8
15+51 LT	880N / 3200E	80'	71	12
60+85 LT	880N / 3100E	20'	95	11
114+00 RT	880N / 3000E	22'	108	18
114+00 LT	880N / 3000E	18'	80	9
152+08 RT	880N / 2920E	120'	54	9
190+33 LT	850N / 2920E	35'	285	35
200+00 RT	850N / 2860E	30'	95	8
203+74 RT	850N / 2850E	22'	95	8
207+55 RT	850N / 2845E	22'	77	7
209+61 LT	850N / 2840E	28'	65	11
209+81 LT	850N / 2840E	22'	80	13
213+10 RT	860N / 2840E	30'	75	7
213+10 LT	860N / 2840E	30'	88	8
216+56 RT	870N / 2840E	20'	50	6
216+56 LT	870N / 2840E	20'	50	6
239+87 LT	900N / 2820E	30'	375	42
TOTALS = 218 TONS				

TYPICAL MAILBOX TURNOUT

STATION	SIDE	SQ. YD.	TON
139+45	RT	25	5
217+00	RT	25	5
TOTAL = 10 TONS			

TYPICAL PRIVATE ENTRANCES

STATION	RT/LT	TYPE	PROPOSED	SQ. YD.	TON
● 42+05	LT	PE	HMA	20	3
● 66+56	LT	PE	HMA	20	3
● 139+25	RT	PE	HMA	20	3
●●● 211+20	LT	PE	HMA	146	13
●● 215+02	LT	PE	HMA	135	15
● 218+27	RT	PE	HMA	35	5
● 219+00	RT	PE	HMA	70	10
● 223+42	LT	PE	HMA	48	8
● 223+55	RT	PE	HMA	48	8
TOTAL = 68 TONS					

- PRIVATE ENTRANCES SHALL RECEIVE ONLY A 4 FOOT PAVED APRON.
- PRIVATE ENTRANCES SHALL RECEIVE ONLY A 9 FOOT PAVED APRON.
- PRIVATE ENTRANCES SHALL RECEIVE ONLY A 12 FOOT PAVED APRON.

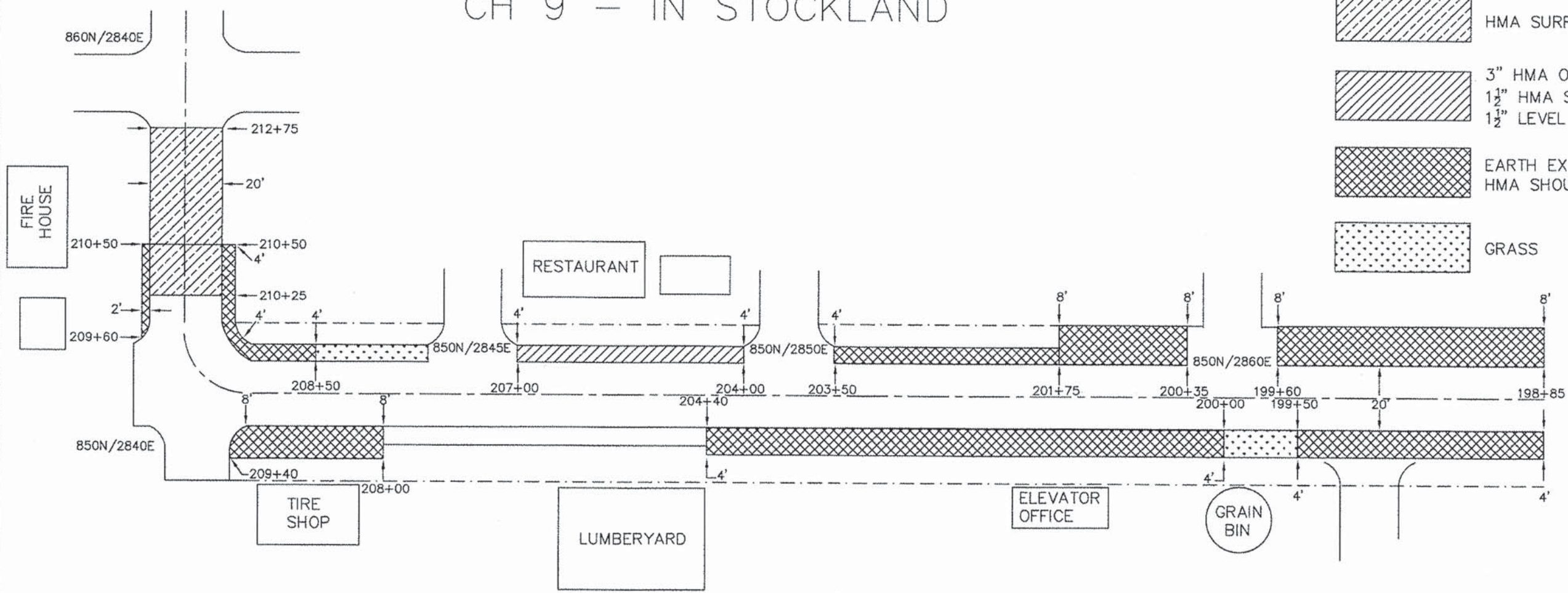
STATION	RT/LT	TYPE	PROPOSED	SQ. YD.	TON
23+90	RT	FE	AGG	---	5
23+95	LT	FE	AGG	---	5
34+30	RT	FE	AGG	---	5
43+48	LT	FE	AGG	---	5
51+15	LT	FE	AGG	---	5
61+30	RT	FE	AGG	---	5
78+20	LT	FE	AGG	---	5
78+55	LT	FE	AGG	---	5
80+80	RT	FE	AGG	---	5
100+70	RT	FE	AGG	---	5
107+25	RT	FE	AGG	---	5
123+30	RT	FE	AGG	---	5
134+33	RT	FE	AGG	---	5
137+50	RT	FE	AGG	---	5
140+40	LT	FE	AGG	---	5
141+09	RT	FE	AGG	---	5
176+79	RT	FE	AGG	---	5
177+20	LT	FE	AGG	---	5
185+34	RT	FE	AGG	---	5
192+83	LT	FE	AGG	---	5
195+50	LT	FE	AGG	---	5
197+50	LT	FE	AGG	---	5
198+35	RT	FE	AGG	---	5
217+50	LT	FE	AGG	---	5
222+00	RT	FE	AGG	---	5
222+58	RT	FE	AGG	---	5
240+10	RT	FE	AGG	---	5


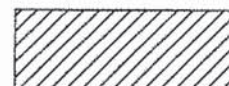
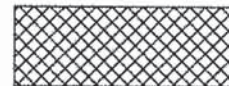
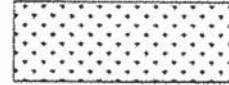
TOTAL AGGREGATE FOR FIELD ENTRANCES = 135 TONS. THIS QUANTITY IS INCLUDED IN AGGREGATE SHOULDERS, TYPE B TOTAL QUANTITY.

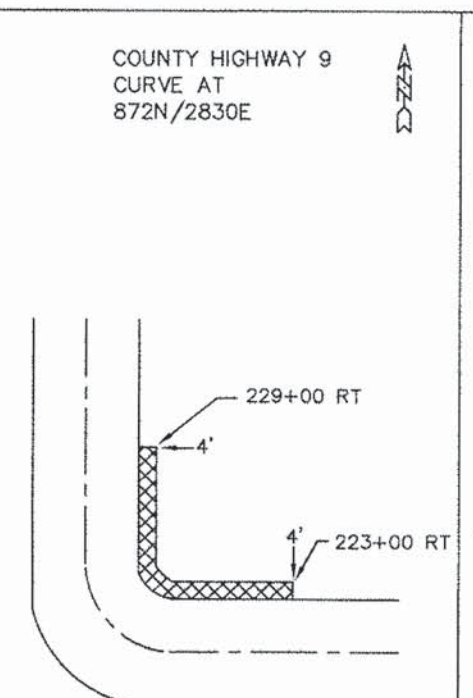
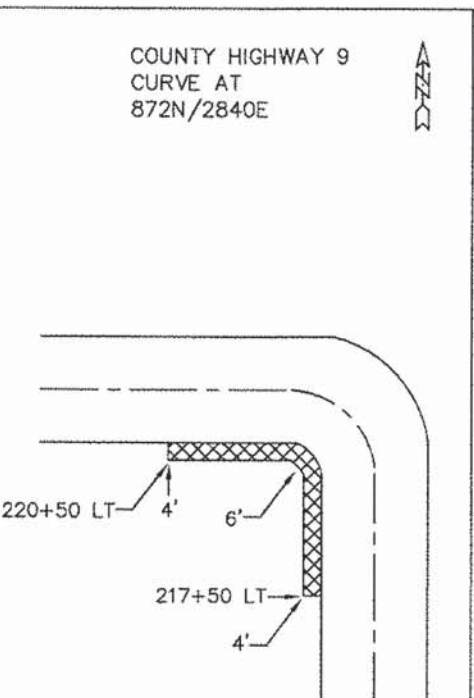
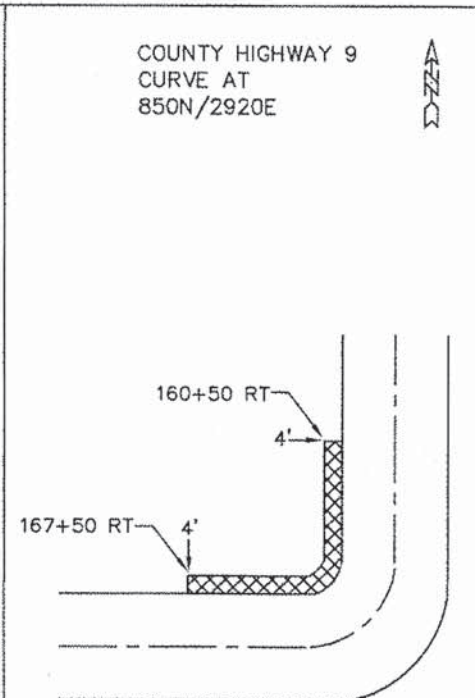
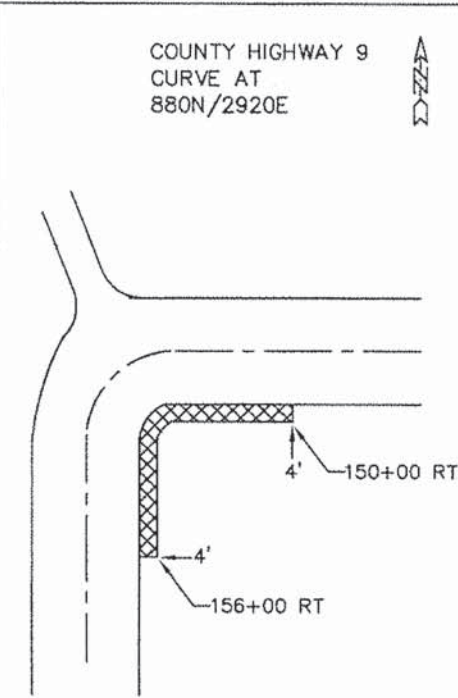
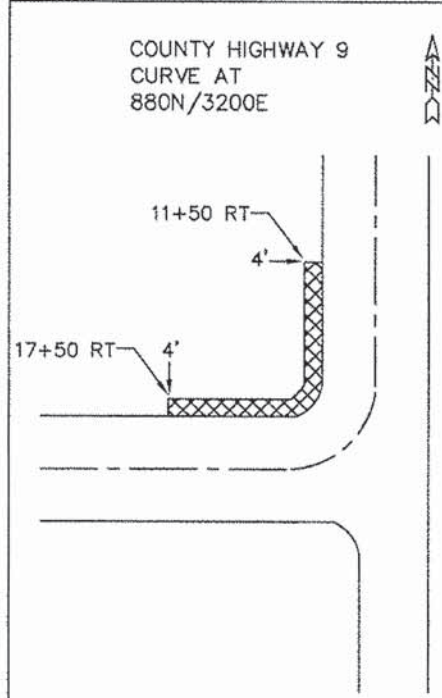
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 334	09-00301-00-RS	IREQUOIS	7	6
JOB C-93-025-14			PROJECT RS-0334(114)	

CONTRACT 87578

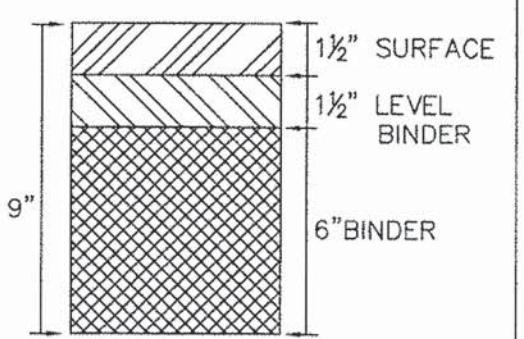
CH 9 - IN STOCKLAND



-  HMA SURFACE REMOVAL 1 1/2"
-  3" HMA OVERLAY ONLY
1 1/2" HMA SURFACE COURSE
1 1/2" LEVEL BINDER (MM), N50
-  EARTH EX WIDENING
HMA SHOULDERS
-  GRASS



HMA SHOULDERS 6" DETAIL



40600982 - HMA SURFACE REMOVAL BUTT JOINT

STATION TO STATION	SQ. YDS.
7+50 TO 8+00	122.2
38+78 TO 39+28	122.2
40+31 TO 40+81	122.2
190+33 LT	38.7
211+10 TO 212+20 LT	146.5
215+05 TO 216+40 LT	135.0
239+87 LT	50.0
240+00 TO 240+50	122.2
TOTAL =	859

44201723 - CLASS D PATCHES, TYPE IV, 6"

STATION TO STATION	SQ. YDS.
13+00 TO 15+00 RT	133.3
162+00 TO 166+00 RT	266.7
TOTAL =	400

44000155 - HMA SURFACE REMOVAL, 1 1/2"

STATION TO STATION	SQ. YDS.
210+25 TO 212+75	556
TOTAL =	556

40600990 - TEMPORARY RAMP

STATION TO STATION	SQ. YDS.
7+50 TO 7+55	12.2
39+28 TO 39+33	12.2
40+31 TO 40+36	12.2
190+33 TO 190+38	19.4
240+50 TO 240+55	11.0
TOTAL =	67

70300100 - SHORT-TERM PAVEMENT MARKING

STATION TO STATION	FOOT
7+50 TO 240+50	4,660
TOTAL =	4,660

**STRIPING QUANTITIES
PAINT PAVEMENT MARKINGS
& NO PASSING ZONES**

**78001110 - PAINT PAVEMENT MARKING - LINE 4"
70300200 - TEMPORARY PAVEMENT MARKING**

TYPE	STATION TO STATION	FEET	LINE 4'
	CENTERLINE		
SKIP DASH	28+55 TO 139+10	11,055	2764
SKIP DASH	176+80 TO 205+00	2820	705
SKIP DASH	237+30 TO 240+50	320	80
	TOTAL =		3,549 FT
	NO PASSING ZONE		
DOUBLE NO PASS	7+50 TO 17+00 LT & RT	1900	1900
SINGLE NO PASS & SKIP DASH	17+00 TO 28+55 LT	1155	1444
SINGLE NO PASS & SKIP DASH	139+10 TO 150+25 RT	1115	1394
DOUBLE NO PASS	150+25 TO 167+10 LT & RT	3370	3370
SINGLE NO PASS & SKIP DASH	167+10 TO 176+80 LT	970	1213
SINGLE NO PASS & SKIP DASH	205+00 TO 208+80 RT	380	475
DOUBLE NO PASS	208+80 TO 210+10 LT & RT	260	260
SINGLE NO PASS & SKIP DASH	210+10 TO 217+80 LT	770	963
DOUBLE NO PASS	217+80 TO 230+45 LT & RT	2530	2530
SINGLE NO PASS & SKIP DASH	230+45 TO 237+30 LT	685	856
	TOTAL =		14,405 FT

TOTAL ALL STRIPING FOR PAINT PAVEMENT MARKING LINE 4' = 17,954'
TOTAL FOR TEMPORARY PAVEMENT MARKING = 17,954'

**20200500 - EARTH EXCAVATION WIDENING
48203100 - HOT-MIX ASPHALT SHOULDERS**

STATION TO STATION	EARTH EX	HMA SHOULDERS
	CU. YDS.	TONS
STA 11+50 TO 17+50 RT	44.4	90.0
STA 150+00 TO 156+00 RT	44.4	90.0
STA 160+50 TO 167+50 RT	51.9	105.0
STA 198+85 TO 199+50 LT	4.8	10.0
STA 198+85 TO 199+60 RT	11.1	22.0
STA 200+00 TO 204+40 LT	32.6	66.0
STA 200+35 TO 201+75 RT	20.7	42.0
STA 201+75 TO 203+50 RT	13.0	26.0
STA 208+00 TO 209+40 LT	20.7	42.0
STA 208+50 TO 210+50 RT	18.5	37.0
STA 209+60 TO 210+50 LT	3.3	7.0
STA 217+50 TO 220+50 LT	27.8	56.0
STA 223+00 TO 229+00 RT	44.8	90.0
TOTAL =	338	683

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 334	09-00301-00-RS	IRROQUOIS	7	7
JOB C-93-025-14			PROJECT RS-0334 (114)	
CONTRACT 87578				

CURVE #1 DATA

P.I.	15+00.00
D	19° - 00'
R	302.94'
T	301.70'
L	472.45
I	89° - 46'
P.C.	11+98.30
P.T.	16+70.75
BEGIN TRANSITION	10+76.86
BEGIN RUNOFF	11+09.86
FULL S.E.	12+41.86
FULL S.E.	16+27.19
END RUNOFF	17+59.19
END TRANSITION	17+92.19
SUPER ELEVATION = 6%	

CURVE #2 DATA

P.I.	153+77.3
D	19° - 00'
R	302.94'
T	298.00'
L	469.7'
I	89° - 15'
P.C.	150+75.30
P.T.	155+49.90
BEGIN TRANSITION	149+53.86
BEGIN RUNOFF	149+86.86
FULL S.E.	151+18.86
FULL S.E.	155+01.34
END RUNOFF	156+33.34
END TRANSITION	156+66.34
SUPER ELEVATION = 6%	

CURVE #3 DATA

P.I.	164+88.9
D	19° - 00'
R	302.94'
T	297.20'
L	467.90'
I	89° - 54'
P.C.	161+90.80
P.T.	166+58.70
BEGIN TRANSITION	160+69.36
BEGIN RUNOFF	161+02.36
FULL S.E.	162+34.36
FULL S.E.	166+15.14
END RUNOFF	166+58.70
END TRANSITION	167+80.14
SUPER ELEVATION = 6%	