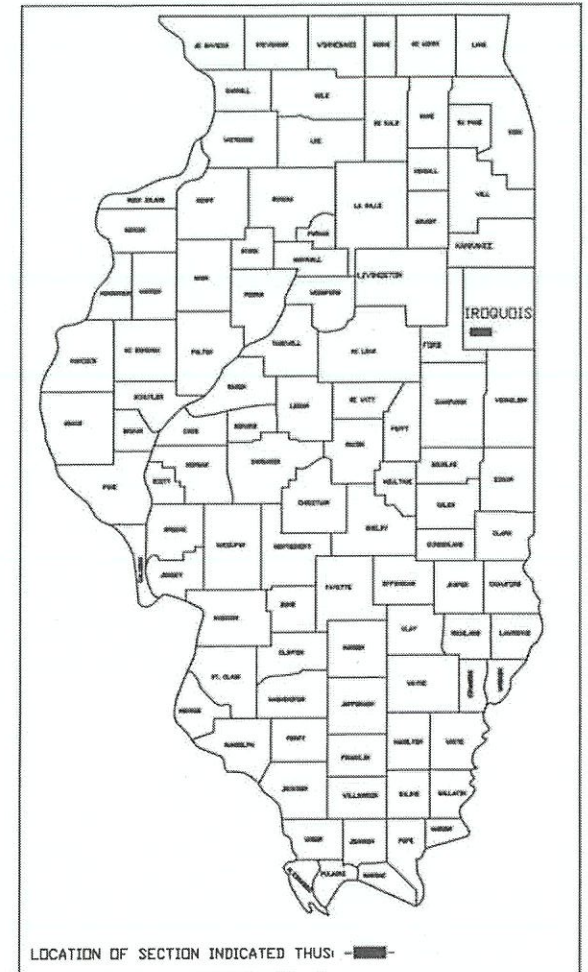


ROUTE NO. FAS 337	SECTION 19-00156-01-RS	COUNTY IROQUOIS	TOTAL SHEETS 5	SHEET NO. 1
JOB #: C-93-015-24			PROJECT # 18HV(064)	

PLANS FOR PROPOSED IMPROVEMENT OF
FEDERAL AID SECONDARY HIGHWAY 337
SURFACE TRANSPORTATION PROGRAM – RURAL
"HMA RESURFACING PROJECT"
IROQUOIS COUNTY

FAS ROUTE 337 (CH 47)
SECTION: 19-00156-01-RS
PROJECT NO. 18HV(064)
JOB NO. C-93-015-24

TOLL FREE JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS (J. U. L. I. E.)
TELEPHONE NUMBER 1-800-892-0123

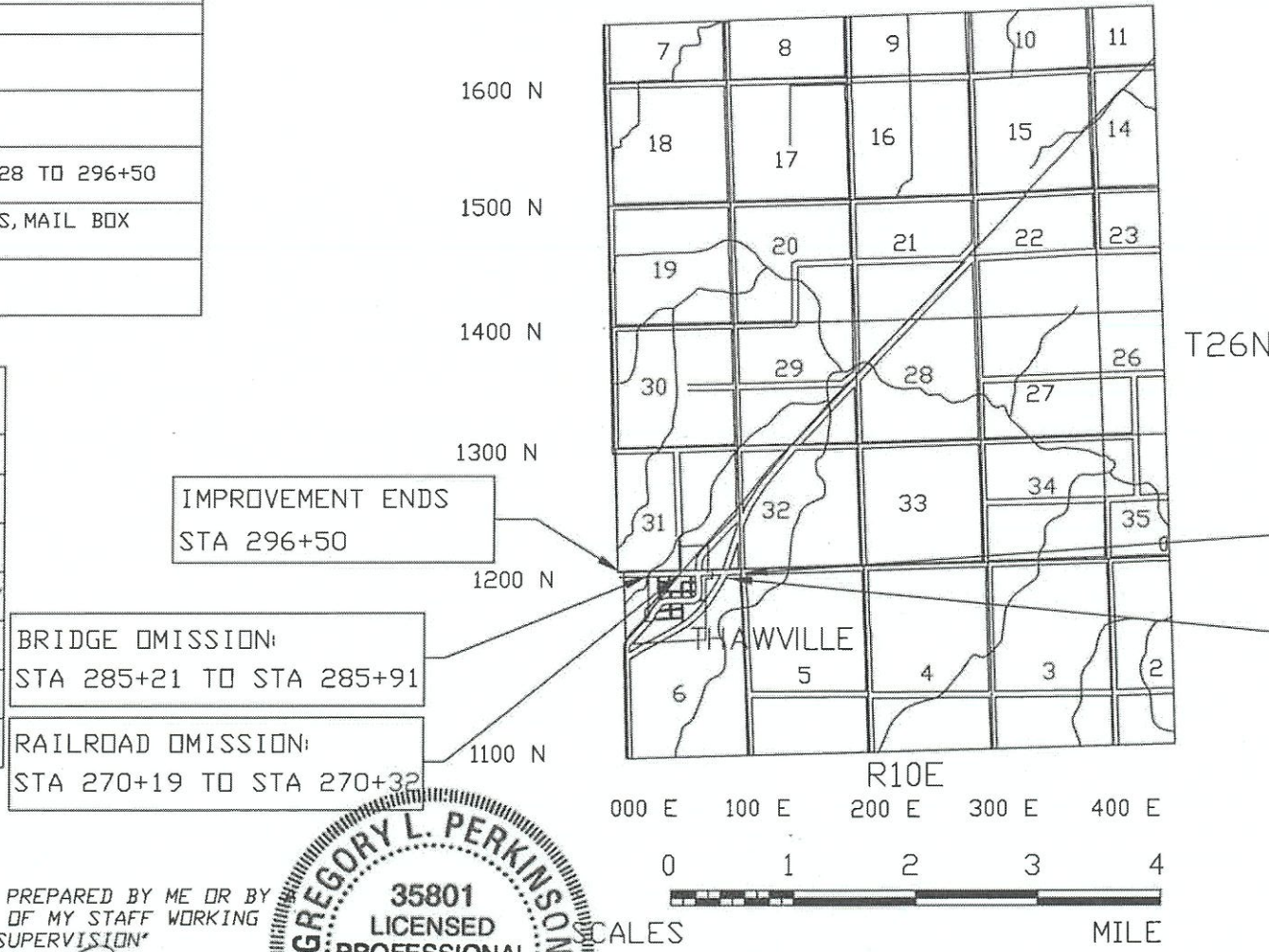


LOCATION OF SECTION INDICATED THUS:

MAJOR COLLECTOR 2032 ADT = 385
PV = 88% SU = 7% MU = 5%
DESIGN SPEED = 50 M. P. H.

INDEX OF SHEETS	
SHEET NUMBER	DESCRIPTION
1	COVER SHEET -- LOCATION MAP
2	SUMMARY OF QUANTITIES, GENERAL NOTES, MIXTURE TABLE, AND BUTT JOINT DETAIL
3	EXISTING & PROPOSED X-SECTIONS - STA. 254+28 TO 296+50
4	TYPICAL ENTRANCES, SIDE ROAD INTERSECTIONS, MAIL BOX TURNOUTS, INCIDENTAL HMA SURFACING
5	QUANTITY TABLES

ILLINOIS HIGHWAY STANDARD DRAWINGS	
000001-08	SYMBOLS AND ABBREVIATIONS
701301-04	LANE CLOSURE, 2L 2W, SHORT TIME OPERATION, FOR SPEEDS > 45 MPH
701306-04	LANE CLOSURE, 2L 2W, SLOW MOVING DAY ONLY OPERATION, FOR SPEEDS > 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS, DAY ONLY
701901-08	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 24-2	MAILBOX TURNOUT



BRIDGE OMISSION:
STA 285+21 TO STA 285+91

RAILROAD OMISSION:
STA 270+19 TO STA 270+32

IMPROVEMENT BEGINS STA 254+28
INTERSECTION OF CH 47 & IL RT 54

OLD STATE ROUTE 54 OMISSION:
STA 264+22 TO STA 264+39

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

GREGORY L. PERKINSON, COUNTY ENGINEER
ILL. REG. PROF. ENG. #062-035801
DATE EXPIRES: 11/30/23



"PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS"

CONTRACT 87828

GROSS LENGTH = 4,222.00 FT. = 0.799 MILE
OMISSION LENGTH = 100.00 FT. = .019 MILE
NET LENGTH = 4,122.00 FT. = 0.780 MILE

Approved MAY 19, 2023

Acting County Engineer

Passed JUNE 2, 2023

DISTRICT THREE DISTRICT ROADS AND STREETS ENGINEER

RELEASED FOR BID
BASED ON LIMITED REVIEW JUNE 2, 2023

REGION TWO ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES			FUND CODE	0005
ITEM #	PAY ITEM #	PAY ITEM	UNIT	QUANTITY
1	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	7,500
2	40600370	LONGITUDINAL JOINT SEALANT	FOOT	4,122
3	40600982	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT	SQ YD	1,156
4	40600990	TEMPORARY RAMP	SQ YD	136
5	40602978	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	TON	900
6	40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX 'C', N50	TON	900
7	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	218
8	48101200	AGGREGATE SHOULDERS, TYPE B	TON	950
9	67100100	MOBILIZATION	L SUM	1
10	70300100	SHORT TERM PAVEMENT MARKING	FOOT	824
11	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	138
12	70300221	TEMPORARY PAVEMENT MARKING - LINE 4' - PAINT	FOOT	1,878
* 13	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	122
* 14	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24'	FOOT	66
* 15	78001110	PAINT PAVEMENT MARKING - LINE 4'	FOOT	3,756
* 16	78011000	GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS & SYMBOLS	SQ FT	122
* 17	78011125	GROOVING FOR RECESSED PAVEMENT MARKING 25'	FOOT	66
18	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1
19	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

* SPECIALITY ITEMS

MIXTURE TABLE

	HMA BINDER	HMA SURFACE	INCIDENTAL HMA
PG GRADE	PG64-22	PG64-22	PG64-22
DESIGN AIR Voids	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 9.5	IL 9.5
FRICTION AGGREGATE	N/A	MIXTURE C	MIXTURE C
DENSITY TEST METHOD	CORES/NUCLEAR	CORES/NUCLEAR	SATISFACTION OF ENGINEER
MIXTURE WEIGHT	112#/Sq. Yd./In.	112#/Sq. Yd./In.	112#/Sq. Yd./In.
QUALITY MANAGEMENT PROGRAM	QC/QA	QC/QA	QC/QA
SUBLOT SIZE	N/A	N/A	N/A
LOCATION(S)	ENTIRE PROJECT	ENTIRE PROJECT	ENTIRE PROJECT
MATERIAL TRANSFER DEVICE (REQUIRED)	NO	NO	NO

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.

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.

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.

SECTION NOTES

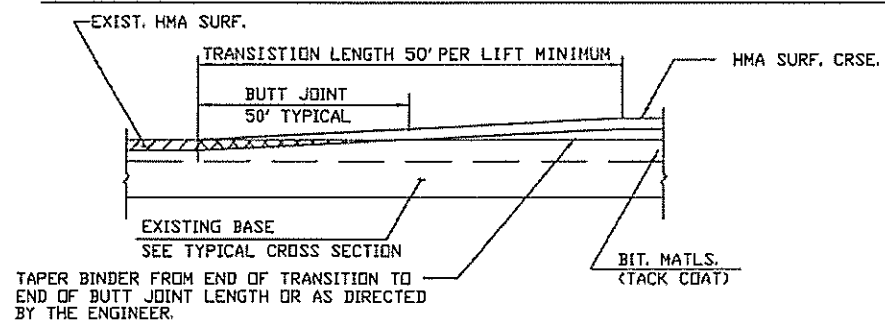
THE PROPOSED IMPROVEMENT CONSISTS OF A HOT MIX ASPHALT SURFACE COURSE INCLUDING BINDER COURSE, SHOULDER STONE AND ALL WORK NECESSARY TO COMPLETE THE PROJECT ACCORDING TO THE PLANS AND SPECIFICATIONS.

COUNTY HIGHWAY 47 WAS CONSTRUCTED UNDER SECTIONS: SECTION 156 MFT ON 4/9/41 FROM STATION 253+93 TO 298+86.5. SECTION 91-00156-01-AS APPROVED 4/24/91 FROM STATION 253+93 TO 298+86.5. EXISTING BITUMINOUS CONCRETE COURSE WAS PLACED AS SECTION 92-00000-00-SM.

APPLICATION RATES

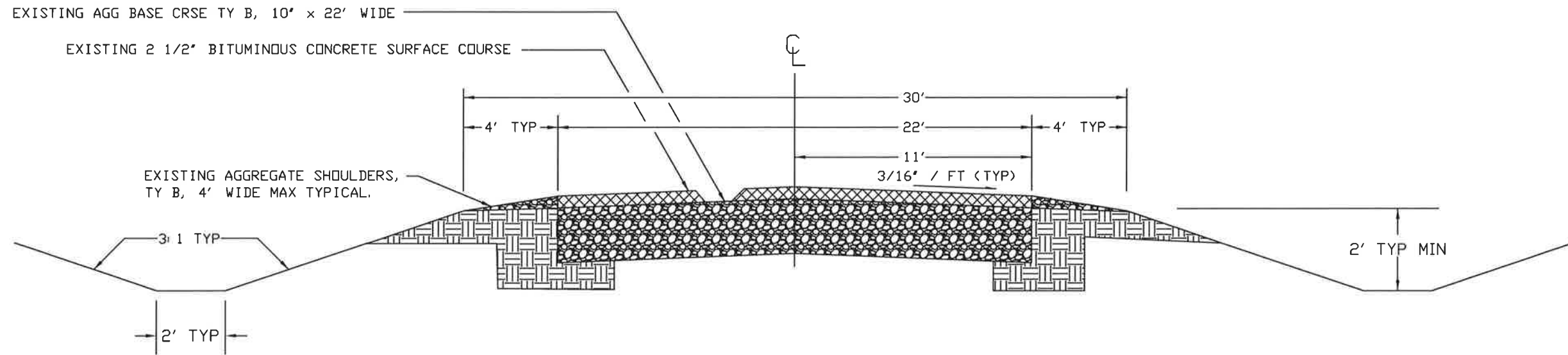
THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUALITIES:		
GRANULAR MATERIALS	2.05	TONS/CU YD
BITUMINOUS MATERIALS TACK COAT	0.05/0.025	LBS/SQ FT
HOT MIX ASPHALT SURFACE COURSE	112	LBS/SQ YD/INCH
BINDER COURSE, IL-19.0, N50	112	LBS/SQ YD/INCH
SHORT TERM PAVEMENT MARKING	4	FT/40 FT OF APPLICATION
PAINT PAVEMENT MARKING - LINE 4'	10	FT/40 FT OF APPLICATION

HMA SURFACE REMOVAL BUTT JOINT DETAIL



EXISTING TYPICAL SECTION 1 - 254+28 TO 296+50

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 337	19-00156-01-RS	IRROQUOIS	5	3
JOB # : C-93-015-24			PROJECT # : I8HV(064)	
CONTACT 87828				

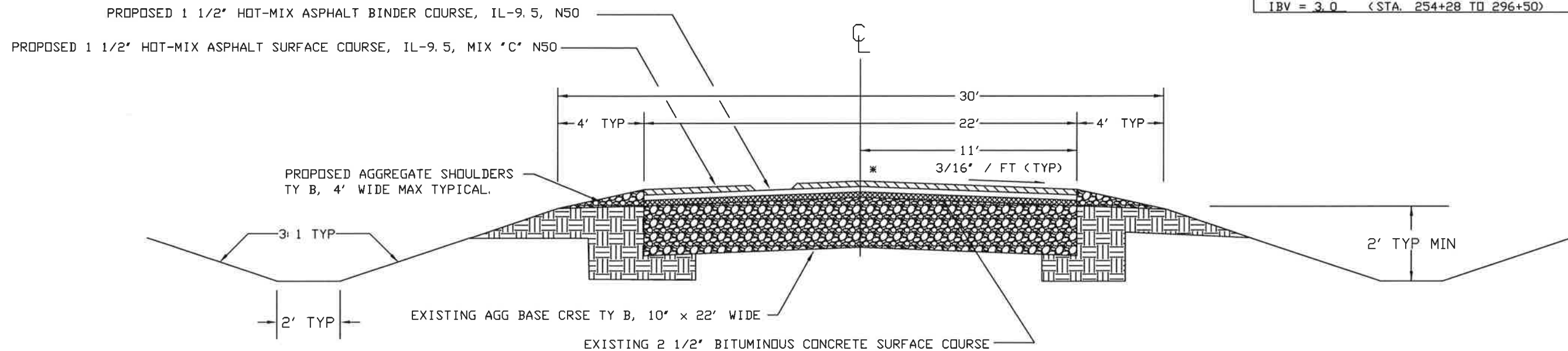


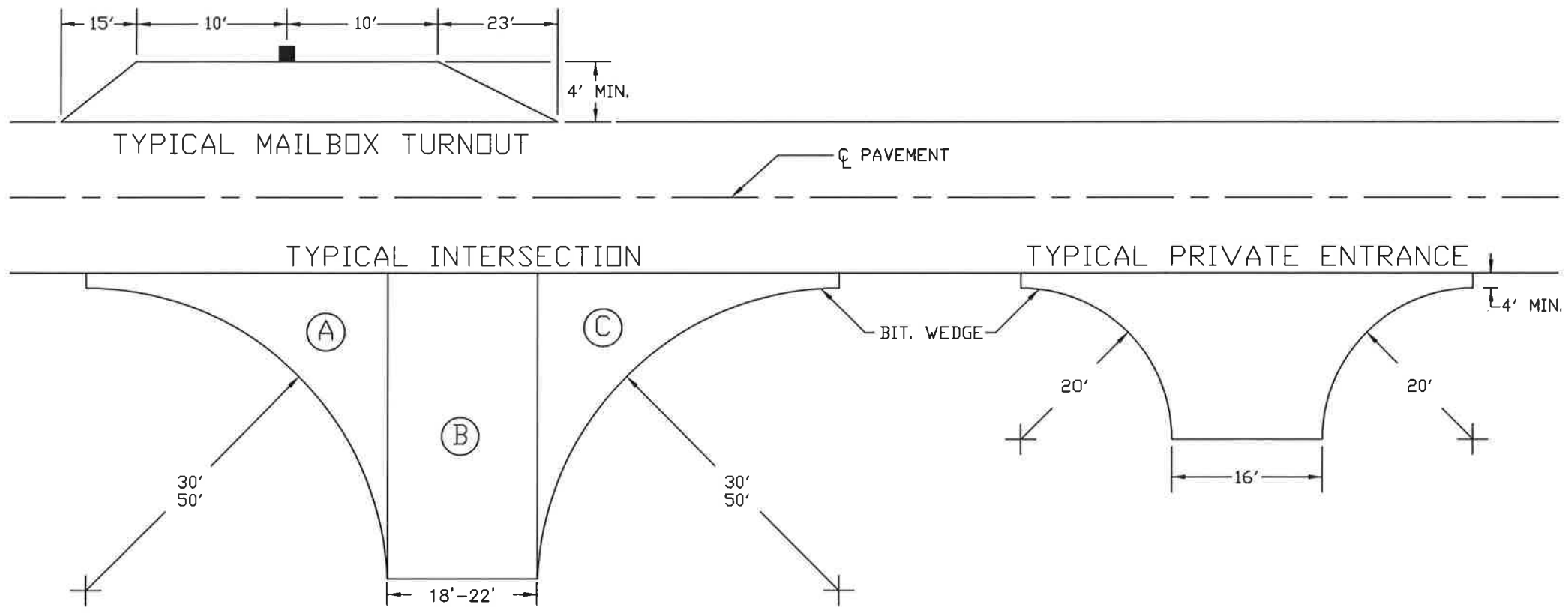
PROPOSED TYPICAL SECTION 1 - 254+28 TO 296+50

PAVEMENT DESIGN - CH 47

STRUCTURAL DESIGN TRAFFIC:	YEAR 2032	
PV= 339 (88%)	SU= 27 (7%)	MU= 19 (5%)
ROAD CLASSIFICATION	CLASS III	
TRAFFIC FACTOR:	ACTUAL TF = 0.10	AC TYPE = PG 64-22
	MINIMUM TF = 1.70	
PG GRADE:	BINDER = PG 64-22	SURFACE = PG 64-22
SUB GRADE SUPPORT RATING:	IBV = 3.0 (STA. 254+28 TO 296+50)	

* LONGITUDINAL JOINT SEALANT
TO BE PLACED BETWEEN BINDER COURSE AND SURFACE COURSE FROM STATION 254+28 TO 296+50 AT THE CENTERLINE JOINT.





A+C = RADIUS ON MAINLINE SHOWN AS SIDE = VAR
 ALL INTERSECTION ARE 18' WIDE UNLESS
 INDICATED WITH A *.
 A+B+C = TYPICAL SIDE ROAD INTERSECTION

NOTE: AGGREGATE THAT IS PLACED AROUND THE
 INCIDENTAL HOT-MIX LOCATIONS SHALL BE PAID FOR AS
 AGGREGATE SHOULDERS, TYPE B AND NO ADDITIONAL
 COMPENSATION WILL BE ALLOWED FOR PLACEMENT AT
 THESE LOCATIONS.

NOTE: ALL PRIVATE ENTRANCES, MAIL BOX
 TURNOUTS AND SIDE ROAD INTERSECTIONS
 SHALL BE PAID FOR AS INCIDENTAL
 BITUMINOUS SURFACING - TOTAL 218 TON.

40800050 - INCIDENTAL HMA SURFACING

TYPICAL PRIVATE ENTRANCES

STATION	WIDTH	SQ. YD.	TON
258+49	LT	25	4
267+27	RT	25	4
267+49	RT	25	4
271+92	RT	25	4
272+15	LT	25	4
273+47	LT	25	4
273+91	LT	25	4
274+14	LT	25	4
275+15 TO 275+36	RT	50	8
275+36 TO 275+81	RT	55	10
275+81 TO 276+25	RT	50	8
276+25 TO 277+30	RT	175	28
278+21	LT	50	8
278+32	RT	50	8
278+40	RT	25	4
278+70	LT	55	10
279+94	LT	25	4
293+33	RT	25	4
294+18	RT	25	4
TOTALS		785	128

TYPICAL INTERSECTION

STATION	SIDE	SQ. YD.	TON
266+37	LT	96	14
268+23	LT	110	16
272+48	RT	110	16
276+85	LT	110	16
281+61	LT	110	16
TOTALS		536	78

TYPICAL MAILBOX TURNOUT

STATION	SIDE	SQ. YD.	TON
257+99	LT	25	4
266+40	RT	25	4
293+70	RT	25	4
TOTALS		75	12

INCIDENTAL HMA SURFACING TOTALS	
TYPICAL INT'S & SIDE ROADS	78 TONS
PRIVATE ENTRANCES	128 TONS
TYPICAL MAILBOX TURNOUT	12 TONS
TOTAL = 218 TONS	

78001110 – PAINT PAVEMENT MARKING – LINE 4”
 70300221 – TEMPORARY PAVEMENT MARKING
 LINE 4” – PAINT

STATION TO STATION	FOOT	LINE 4”
NO PASSING ZONES		
266+43 to 274+68	825	1,032
CENTERLINE		
254+28 TO 264+22	994	249
264+39 TO 266+43	204	51
274+68 TO 296+50	2,182	546
SUB -TOTAL=		1,878
TOTAL ALL STRIPING FOR PAINT PAVEMENT MARKING LINE 4” (TWO APPLICATIONS) = 3,756’		
TOTAL FOR TEMPORARY PAVEMENT MARKING = 1,878’		

78000650
 THERMOPLASTIC PAVEMENT MARKING – LINE 24”

STATION	FOOT
266+54 RT	11
267+04 RT	11
269+90 RT	11
270+65 LT	11
273+64 LT	11
274+16 LT	11
TOTAL =	
66	

70300150
 SHORT TERM PAVEMENT MARKING REMOVAL

STATION TO STATION	SQ FT
254+28 TO 296+50	138
TOTAL =	
138	

67100100
 MOBILIZATION

STATION TO STATION	L SUM
ENTIRE JOB	1
TOTAL =	
1	

78011125
 GROOVING FOR RECESSED PAVEMENT MARKING 25”

STATION	FOOT
266+54 RT	11
267+04 RT	11
269+90 RT	11
270+65 LT	11
273+64 LT	11
274+16 LT	11
TOTAL =	
66	

78000100
 THERMOPLASTIC PAVEMENT MARKING, LETTERS & SYMBOLS

STATION TO STATION	SQ FT
266+80 RT	61
273+39 LT	61
TOTAL =	
122	

70300100
 SHORT TERM PAVEMENT MARKING

STATION TO STATION	FOOT
254+28 TO 296+50	412
TOTAL =	
412	
(2 LIFTS) TOTAL =	
824	

40600990
 TEMPORARY RAMP

STATION	SQ. YDS.
254+28 TO 254+35	17
264+15 TO 264+22	17
264+39 TO 264+46	17
270+12 TO 270+19	17
270+32 TO 270+39	17
285+14 TO 285+21	17
285+91 TO 285+98	17
296+43 TO 296+50	17
TOTAL =	
136	

78011000
 GROOVED FOR RECESSED PAVEMENT MARKING LETTERS & SYMBOLS

STATION TO STATION	SQ FT
266+80 RT	61
273+39 LT	61
TOTAL =	
122	

Z0048665
 RAILROAD PROTECTIVE LIABILITY INSURANCE

STATION TO STATION	L SUM
ENTIRE JOB	1
TOTAL =	
1	

X7010216
 TRAFFIC CONTROL & PROTECTION (SPECIAL)

STATION TO STATION	L SUM
ENTIRE JOB	1
TOTAL =	
1	

40600982
 HMA SURFACE REMOVAL BUTT JOINT

STATION TO STATION	SQ. YDS.
254+28 TO 254+78	122
263+72 TO 264+22	122
264+39 TO 264+89	122
268+25 LT	18
269+69 TO 270+19	122
270+32 TO 270+82	122
272+43 RT	15
275+36 RT TO 275+81 RT	35
276+80 LT	19
278+21 LT	2
278+70 LT	2
278+32 RT	34
281+57 LT	55
284+71 TO 285+21	122
285+91 TO 286+41	122
296+00 TO 296+50	122
TOTAL =	
1156	

PAVEMENT SCHEDULE

PAY ITEM	40602978	40604050	48101200	40600290	40600370
UNIT	(TON)	(TON)	(TON)	(POUND)	(FOOT)
STATION TO STATION	HMA BINDER COURSE IL-9.5, N50	HMA SURFACE COURSE IL-9.5 MIX 'C' N50	AGGREGATE SHOULDERS TYPE B	BITUMINOUS MATERIALS (TACK COAT)	LONGITUDINAL JOINT SEALANT
254+28 TO 296+50	900	900	950	7,500	4,122
TOTAL =		900	950	7,500	4,122