

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

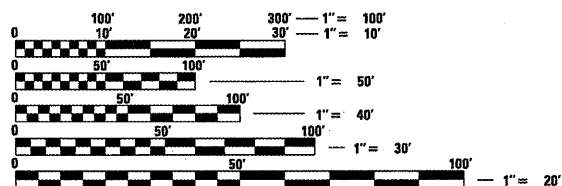
FAP ROUTE 103 (IL 13/15)  
SECTION 27-4  
PATCHING & RESURFACING  
ST. CLAIR COUNTY  
C-98-081-10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST. CLAIR	24	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 76D97		

**INDEX OF SHEETS**

1. COVER SHEET
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- 14.- 20. PAVEMENT MARKING PLANS
21. PAVEMENT JOINT DETAIL
22. PAVEMENT MARKING DETAILS
- 23.-24. TRAFFIC SIGNAL MODERNIZATION

D-98-063-10

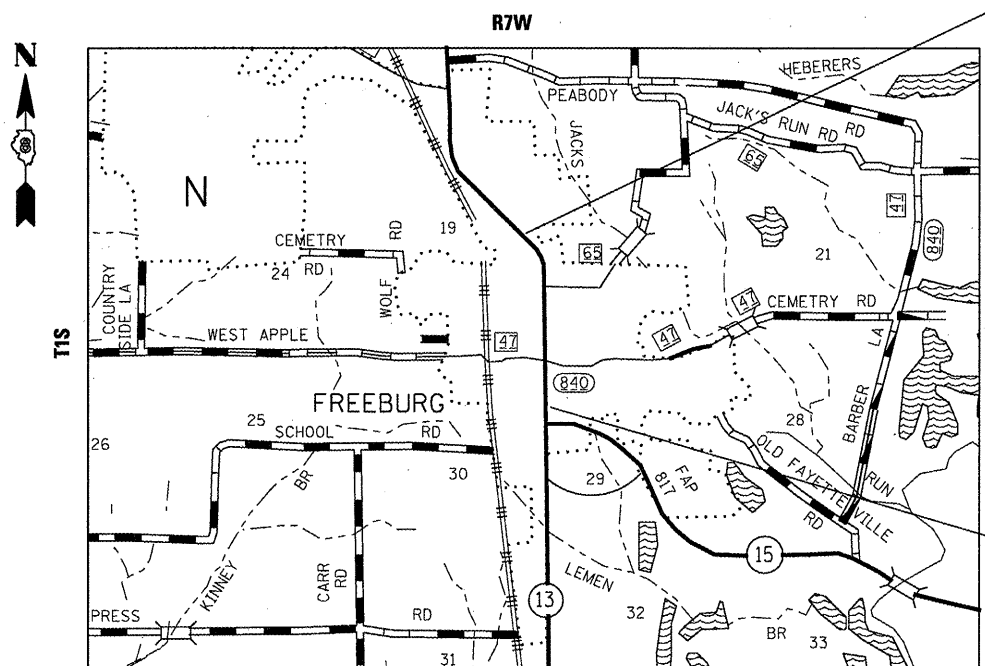


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123  
OR 811

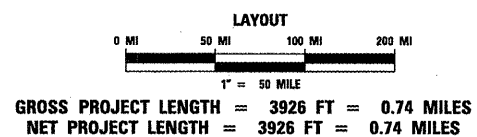
PROJECT ENGINEER: PATTI LEBEAU (618)346-3179  
SQUAD LEADER: CHERYL KEPLAR (618)346-3186

CONTRACT NO. 76D97



BEGIN PROJECT  
STA. 364 + 10  
(WOODS MANOR)  
LAT. = 38.431269  
LONG. = -89.909050

END PROJECT  
STA. 403 + 36  
(LINCOLN CT.)  
LAT. = 38.420963  
LONG. = -89.909064



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED May 7 2010  
Wally C. Jamel  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

June 05 2010  
Scott E. Stitt, P.E.  
Acting ENGINEER OF DESIGN AND ENVIRONMENT

June 25 2010  
Christine M. Reed  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

## GENERAL NOTES

- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE TO BE GIVEN TO UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

- AMEREN IP (ELECTRIC)
- AMEREN IP (GAS)
- AT&T ILLINOIS (COMMUNICATIONS)
- CHARTER COMMUNICATIONS, INC. (CABLE TV)
- FSH WATER COMMISSION (WATER)
- MCI NETWORKS SERVICES, INC. (COMMUNICATIONS)
- 360 NETWORKS (USA) INC. (COMMUNICATIONS)

MEMBERS OF J.U.L.I.E. (800)-892-0123 ARE INDICATED BY \*. NON J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

- THE THICKNESS OF THE HMA MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

- THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	POLY-SURFACE
AC/PG	SBS PG 76-22
RAP % (MAX)	SEE SPEC.
DESIGN AIR VOIDS	4.0% @ Ndes=70
MIX COMPOSITION	
(GRADATION MIXTURE)	IL 12.5/9.5
FRICITION AGG	MIXTURE "D"

Plan quantities for HMA Concrete Surface Course items are calculated using a unit weight of 112 lb/sq yd/in (59.8 kg/sq m/25 mm thickness).

- "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT THE BEGINNING OF THE PROJECT AND THE INTERSECTING SIDE ROADS, AND WILL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE 48" X 48".
- FLAGGERS SHALL BE PRESENT DURING ALL WORK HOURS, INCLUDING LUNCH HOUR, AND NO ADDITIONAL COMPENSATION SHALL BE APPLIED.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING SHOWN IN THE PLANS WAS CREATED USING MICROFILM AND FIELD MEASUREMENTS MADE BY DESIGN PERSONNEL. IT SHALL BE ASSUMED TO BE APPROXIMATE.
- THE USE OF VIBRATORY ROLLERS IS PROHIBITED. THIS DOES NOT RELIEVE THE CONTRACTOR OF DENSITY REQUIREMENTS FOR THE HMA PAVEMENTS AS SPECIFIED IN SECTIONS 406 & 407 OF THE STANDARD SPECIFICATIONS.
- TYPE III BARRICADES WITH APPROPRIATE LIGHTS SHALL BE PLACED AT ALL SIDE ROADS WHILE ACCESS IS NOT AVAILABLE DURING PAVEMENT REMOVAL AND PAVEMENT PATCHING. PAYMENT SHALL BE INCLUDED IN TRAFFIC CONTROL PAY ITEMS.
- ACCESS TO ALL HOMES AND BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
- TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
- A QUANTITY FOR STRIP REFLECTIVE CRACK CONTROL HAS BEEN ADDED TO THE CONTRACT TO BE PLACED AROUND THE TOP, BOTTOM AND SIDE OF THE PATCHES BEFORE RESURFACING OPERATIONS BEGIN, AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL MILL THE PAVEMENT BEFORE PATCHING OPERATIONS BEGIN.
- THE STANDARDS AND REVISION NUMBERS LISTED SHALL APPLY TO THIS PROJECT.
- THE PAVEMENT MARKING SHOWN IN THE PLANS IS APPROXIMATE. THE LOCATION OF THE PROPOSED PAVEMENT MARKING SHOULD MATCH EXISTING FIELD CONDITIONS.
- SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED, PRIMED, AND FINAL BITUMINOUS SURFACE. ONLY THE REMOVAL OF THE FINAL SURFACE APPLICATION SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL - 50 FT. A QUANTITY FOR TEMPORARY PAVEMENT MARKING EQUAL TO THE AMOUNT OF PERMANENT PAVEMENT MARKING HAS BEEN ADDED TO THE PLANS.
- ALL TEMPORARY PAVEMENT MARKINGS WILL BE PLACED IN SUCH A MANNER SO AS NOT TO INTERFERE WITH THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

## COMMITMENTS

COMMITMENTS FOR THIS PROJECT ARE AS FOLLOWS:

NONE

## HIGHWAY STANDARDS

000001-05  
001006  
442201-03  
701301-03  
701311-03  
701502-03  
701901-01  
780001-02  
781001-03  
886001-01  
886006-01

## ADT

2009 ADT = 14,600 (ACTUAL)  
2011 ADT = 14,900 (ESTIMATED)  
2031 ADT = 18,200 (ESTIMATED)  
SU = 2.7%  
MU = 1.5%

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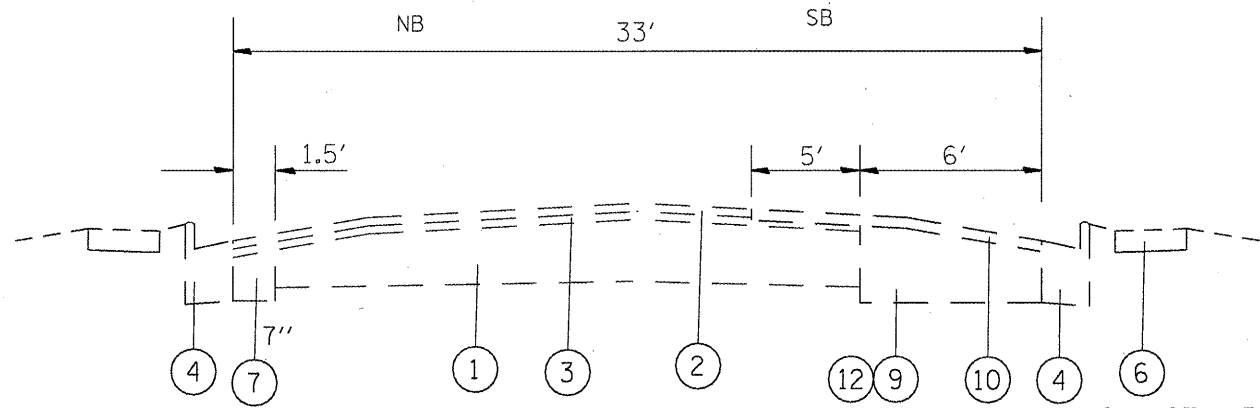


RESURFACING					
STATION	HMA SURFACE REMOVAL, 2"	TEMPORARY RAMPS	POLY HMA SURFACE COURSE, MIX D, N70	AGGREGATE (PRIME COAT)	BITUMINOUS MATERIALS (PRIME COAT)
	SQ YD	SQ YD	TON	TON	TON
NB 364+10 - 390+30	3233.3	17.9	362.1	4.9	1.01
NB 393+00 - 395+30	357.8	18.6	40.1	0.5	0.11
SB 395+25 - 397+50	303.3	18.6	34.0	0.5	0.14
NB 397+90 - 398+90	133.3	18.6	14.9	0.2	0.05
SB 401+61 - 403+36	233.4	18.6	26.1	0.4	0.07
NB 401+18 - 402+93	233.3	18.6	26.2	0.4	0.07
TOTALS	4494.4	110.9	503.4	6.9	1.40

PATCHING SCHEDULE				
STA. TO STA.	LENGTH	WIDTH	CLASS C, TYPE IV, 11"	STRIP REFLEC. CRACK CONTROL TREATMENT
	FEET	FEET	SQ YD	FOOT
NB 364+10 - 390+30	2620	6	1746.7	2632
NB 393+00 - 395+30	230	6	153.3	242
SB 395+25 - 397+50	225	6	125.0	235
NB 397+90 - 398+90	100	6	55.6	110
SB 401+61 - 403+36	175	6	116.7	187
NB 401+18 - 402+93	175	6	116.7	187
TOTALS			2314.0	3593

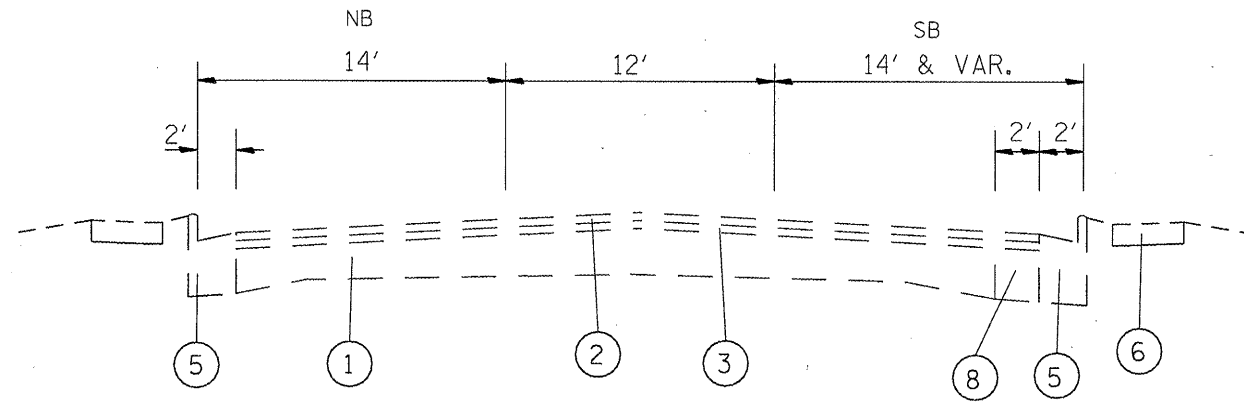
PAVEMENT MARKING SCHEDULE											
STATION	LENGTH	SHORT-TERM PAVEMENT MARKING (2 APPS)	WORK ZONE PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT MARKING - LINE 4"	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 12"	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	TEMPORARY PAVEMENT MARKING - LINE 24"	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER
	FEET	FEET	SQ FT	FEET	FEET	FEET	FEET	FEET	FEET	EACH	EACH
NB 364+10 - 390+30	2620	960	160.0	3333	3333	37.3	37.3	12	12	66	66
NB 393+00 - 395+30	230	80	13.3	290	290					6	6
SB 395+25 - 397+50	225	80	13.3	285	285					6	6
NB 397+90 - 398+90	100	32	5.3	130	130					3	3
SB 401+61 - 403+36	175	64	10.7	215	215					4	4
NB 401+18 - 402+93	175	64	10.7	215	215					4	4
TOTALS	3525	1280	213.3	4468	4468	37.3	37.3	12	12	89	89

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		DATE - -----	REVISED - ---		FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT							

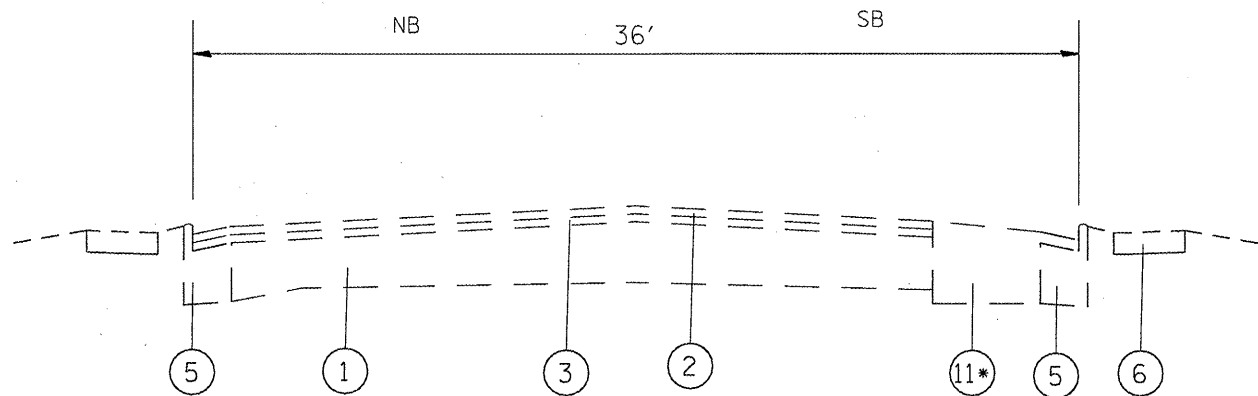


EXISTING TYPICAL SECTION  
STA. 364+10 TO STA. 387+50

- 9 = STA. 366+29 - 373+74  
STA. 374+10 - 386+08
- 12 = STA. 366+23 - 366+29  
STA. 373+74 - 373+80  
STA. 374+04 - 374+10  
STA. 386+08 - 386+14

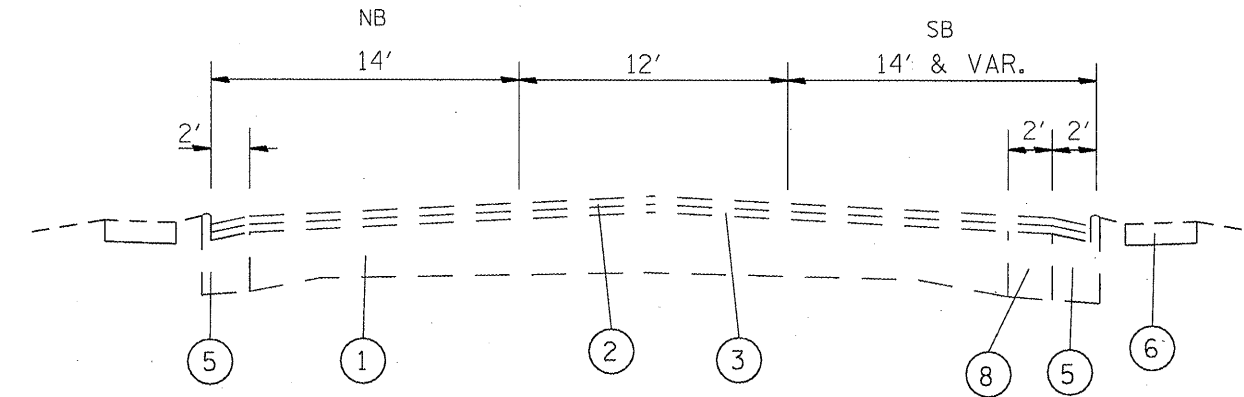


EXISTING TYPICAL SECTION  
STA. 387+50 TO STA. 390+30



EXISTING TYPICAL SECTION  
STA. 395+40 TO STA. 402+59

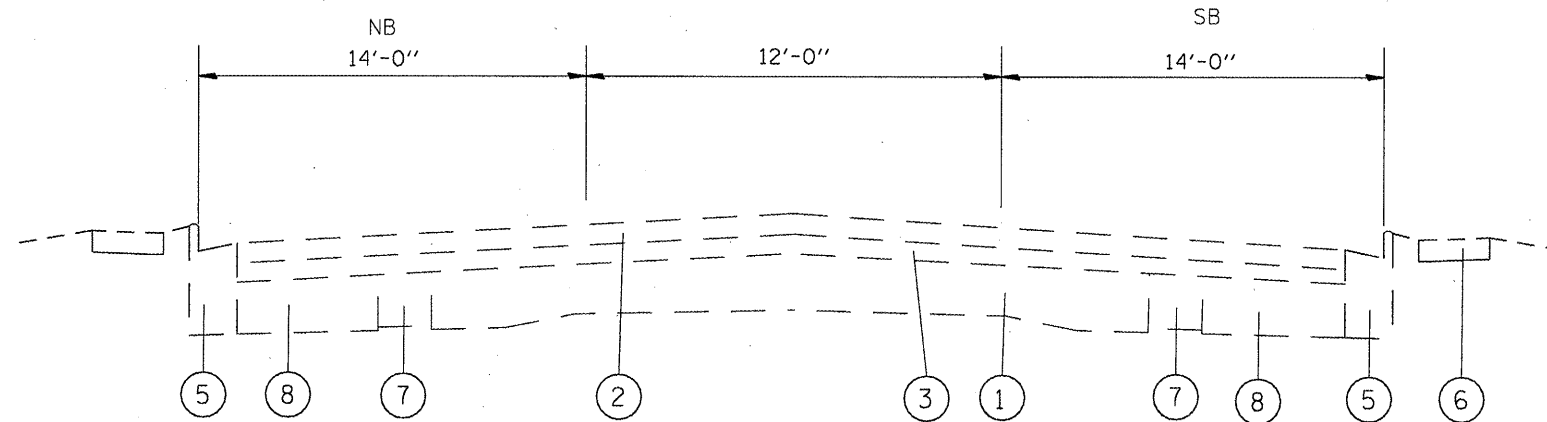
\*STA. 400+14 - 400+19



EXISTING TYPICAL SECTION  
STA. 390+30 TO STA. 395+40

**LEGEND**

- ① EXISTING PCC PAVEMENT, 9"-7"-9"
- ② EXISTING HMA SURFACE COURSE, MIX D, CLASS I, TYPE 2, 1 1/2"
- ③ EXISTING HMA BINDER COURSE, MIX B, TYPE 2, 2 1/4" & VAR.
- ④ EXISTING CCC&G, TYPE B-6.18
- ⑤ EXISTING CCC&G, TYPE B-6.24
- ⑥ EXISTING SIDEWALK
- ⑦ EXISTING PCC BASE COURSE WIDENING, 8"
- ⑧ EXISTING PCC BASE COURSE WIDENING, 9"
- ⑨ EXISTING PCC BASE COURSE WIDENING, 10 1/2"
- ⑩ EXISTING HMA SURFACE COURSE MIX "D" N90, 2"
- ⑪ EXISTING CLASS "C" PATCH, 10 1/2"
- ⑫ EXISTING CLASS "D" PATCH, 14"



EXISTING TYPICAL SECTION  
STA. 402+59 TO 403+36

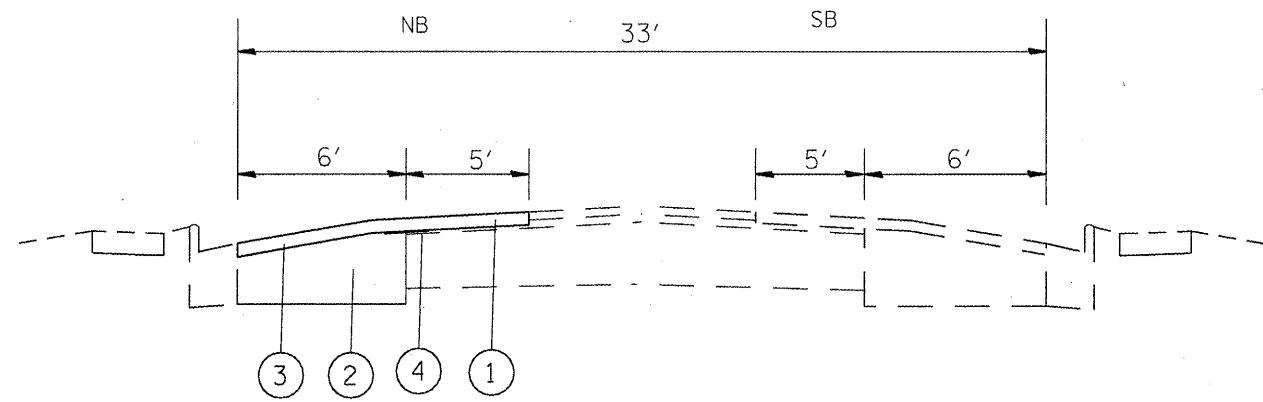
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

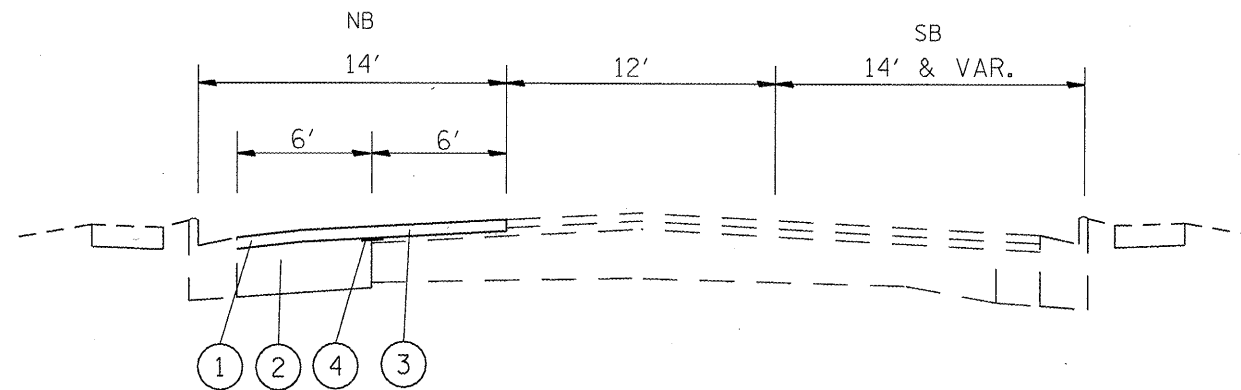
EXISTING TYPICAL SECTIONS

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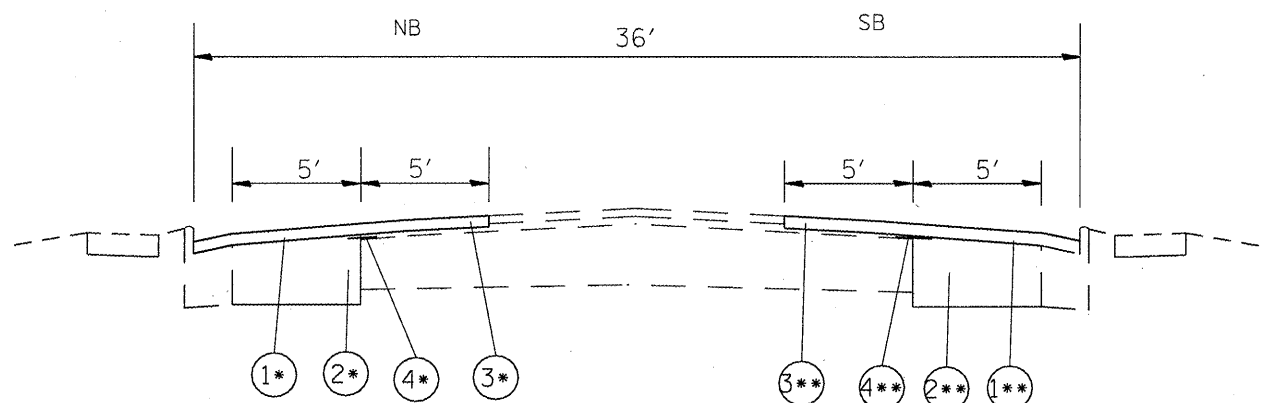
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FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	



PROPOSED TYPICAL SECTION  
STA. 364+10 TO STA. 387+50



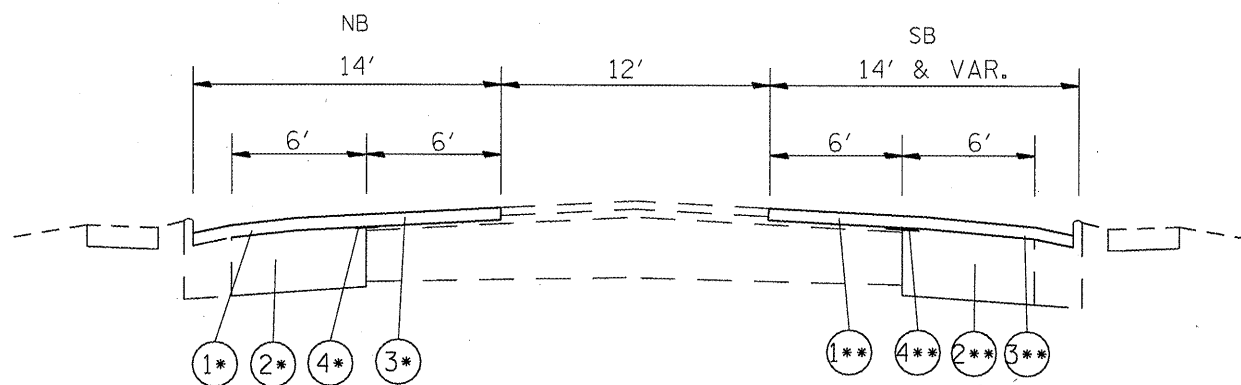
PROPOSED TYPICAL SECTION  
STA. 387+50 TO STA. 390+30



PROPOSED TYPICAL SECTION  
STA. 395+40 TO STA. 402+59

\*STA. 397+90 TO 398+90  
STA. 401+18 TO 402+59

\*\*STA. 395+40 TO 397+50  
STA. 401+61 TO 402+59



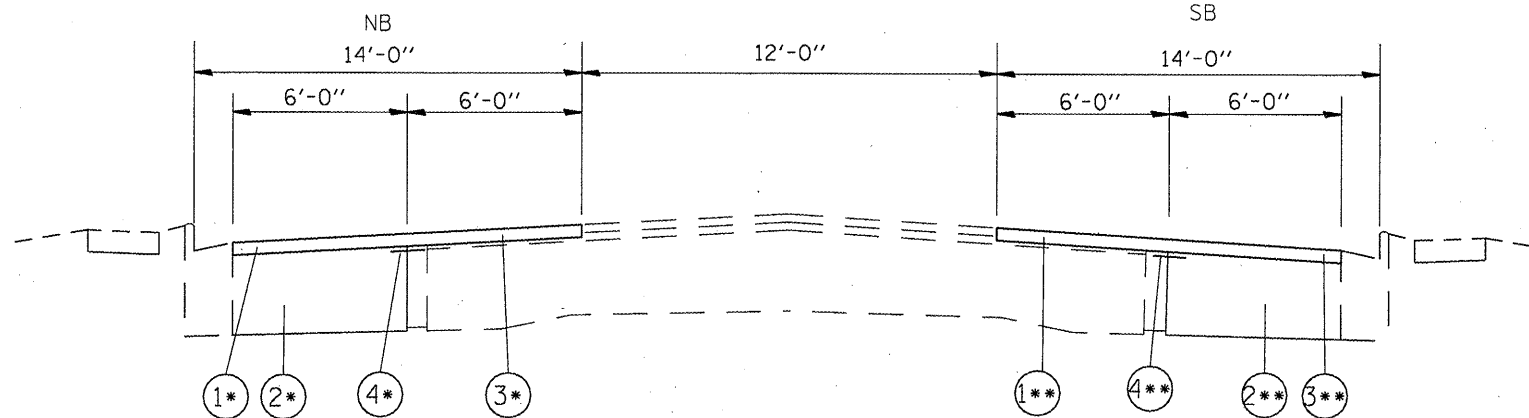
\*STA. 393+00 TO 395+30

\*\*STA. 395+25 TO 395+40

PROPOSED TYPICAL SECTION  
STA. 390+30 TO STA. 395+40

**LEGEND**

- ① PROPOSED HMA SURFACE REMOVAL, 2"
- ② PROPOSED CLASS "C" PATCH, 11"
- ③ PROPOSED HMA SURFACE COURSE, MIX "D", N90, 2"
- ④ PROPOSED STRIP REFLECTIVE CRACK CONTROL



\*STA. 402+59 TO 402+93

\*\*STA. 402+59 TO 403+36

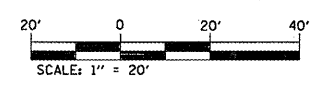
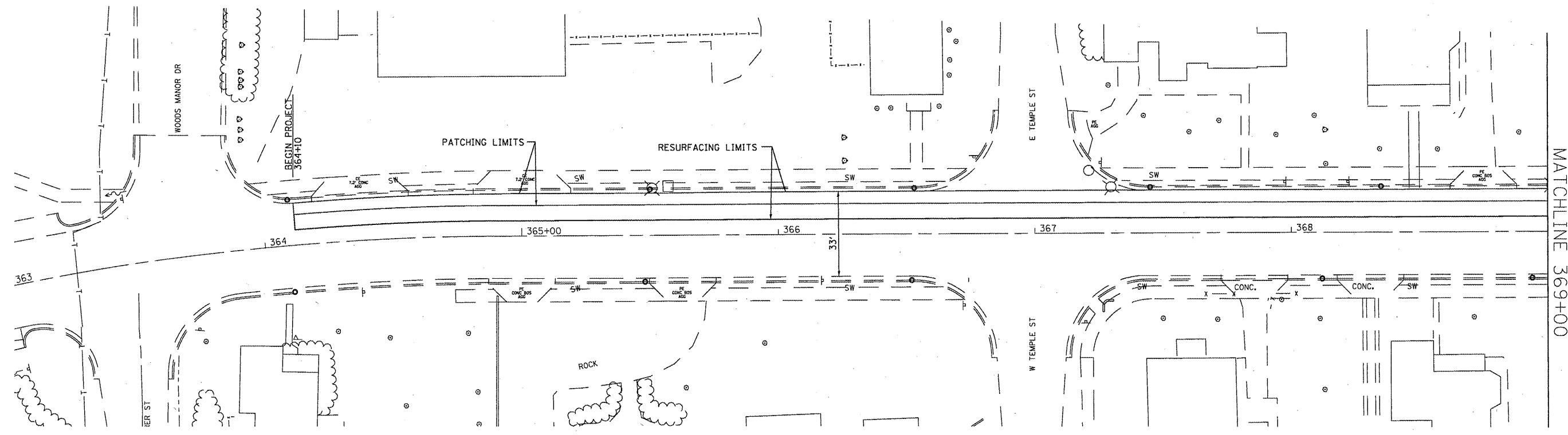
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STA. 402+59 TO 403+36

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

SCALE: _____	SHEET NO. ___ OF ___ SHEETS	STA. _____ TO STA. _____	F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 6	SHEET NO. 6
			FED. ROAD DIST. NO. _____ ILLINOIS FED. AID PROJECT				



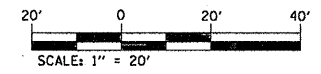
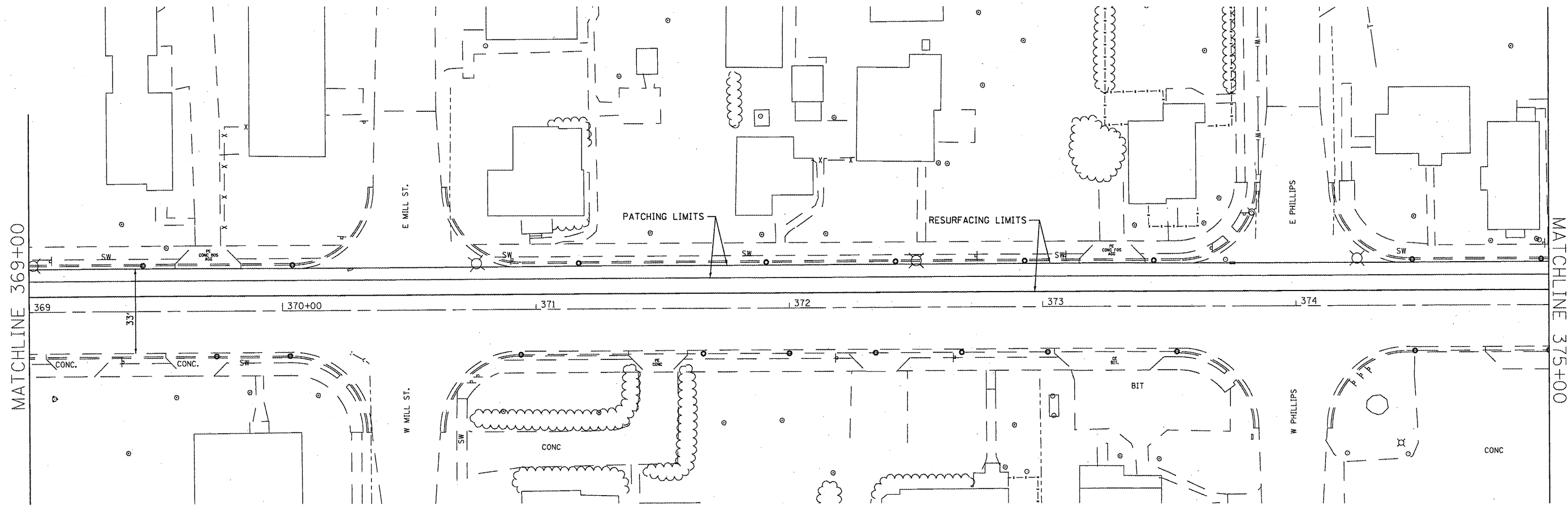
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET**

SCALE: 20' SHEET NO. 1 OF 7 SHEETS STA. 363+00 TO STA. 369+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST. CLAIR	24	7
CONTRACT NO. r6D97				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



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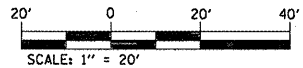
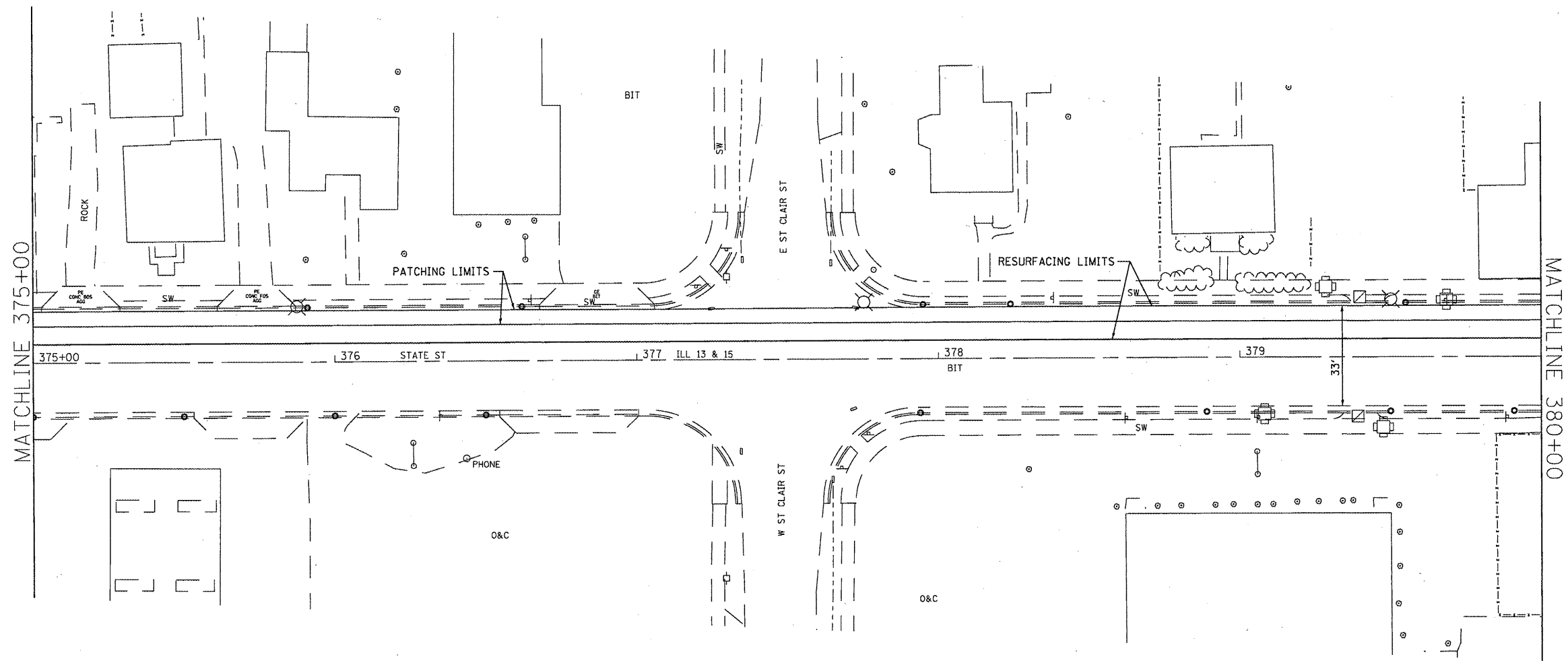
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET**

SCALE: 20' SHEET NO. 2 OF 7 SHEETS STA. 369+00 TO STA. 375+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST. CLAIR	24	8
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	





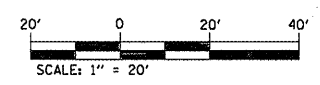
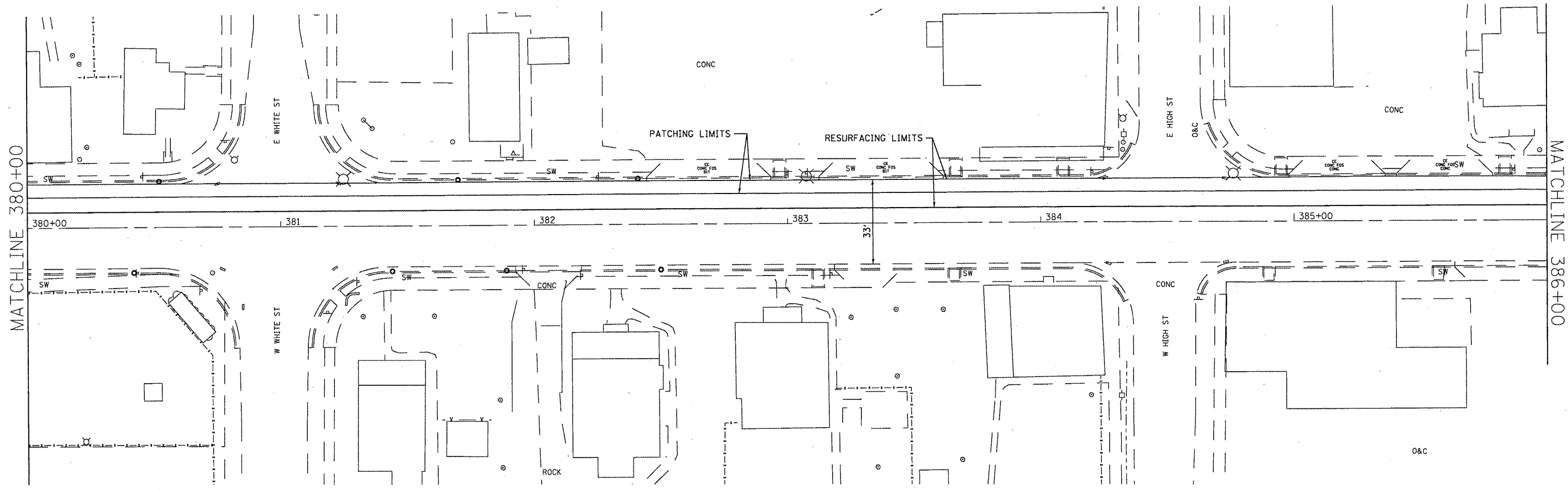
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		DATE - -----	REVISED - ---

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET**

SCALE: 20' SHEET NO. 3 OF 7 SHEETS STA. 375+00 TO STA. 380+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	9
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	

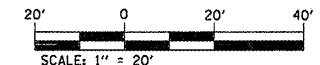
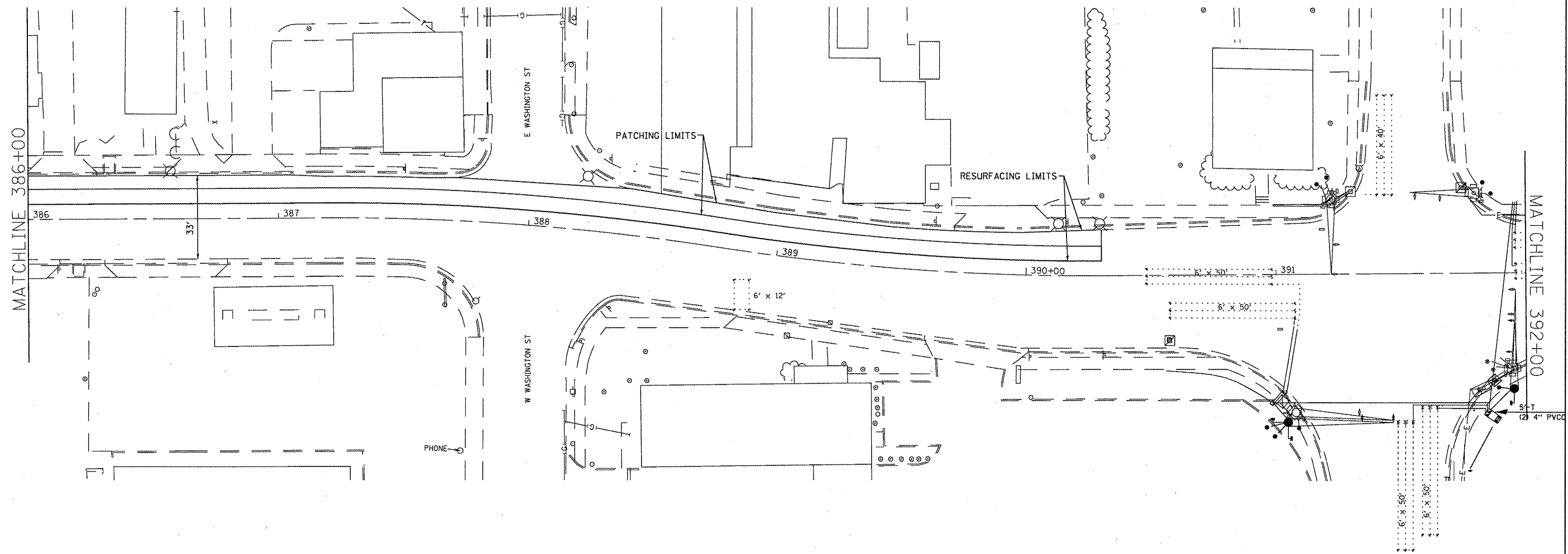
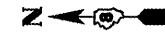


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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PLAN SHEET</b>		
SCALE: 20' = 1"	SHEET NO. 4 OF 7 SHEETS	STA. 380+00 TO STA. 386+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	10
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	



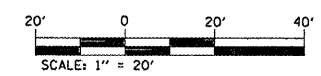
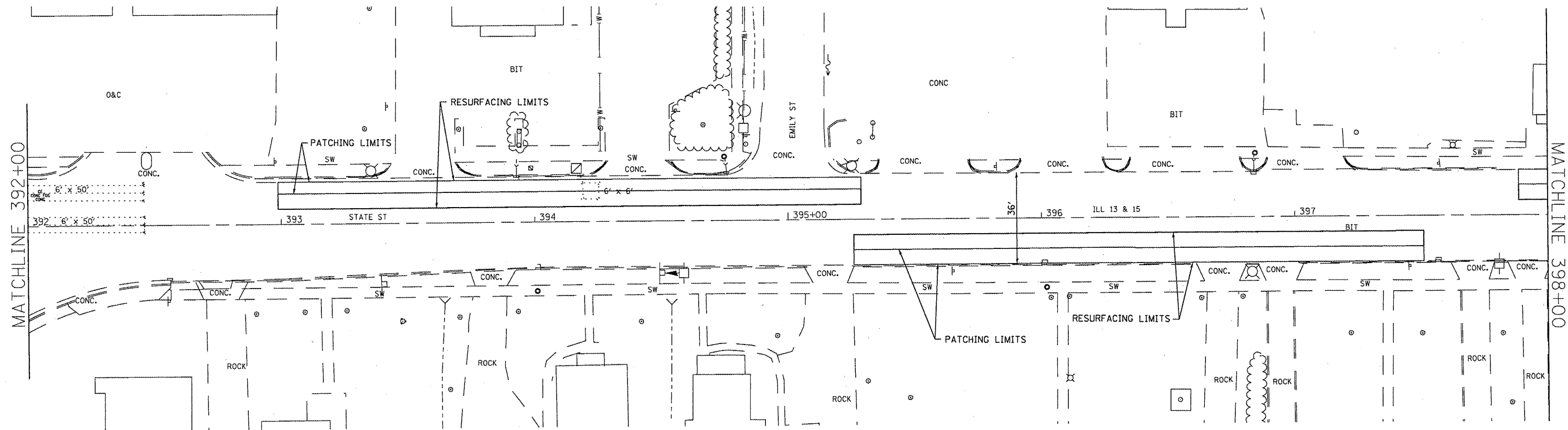
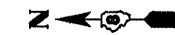
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET**

SCALE: 20' SHEET NO. 5 OF 7 SHEETS STA. 386+00 TO STA. 392+00

F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 24	SHEET NO. 11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	



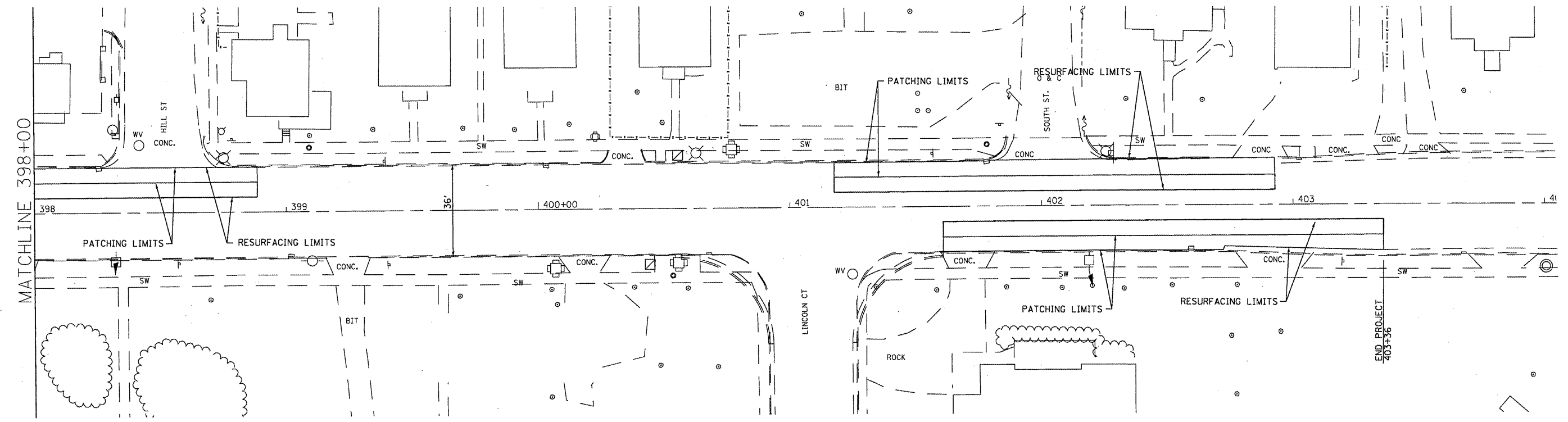
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN SHEET**

SCALE: 20' SHEET NO. 6 OF 7 SHEETS STA. 392+00 TO STA. 398+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	12
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76097	

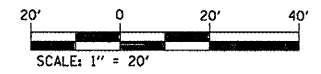
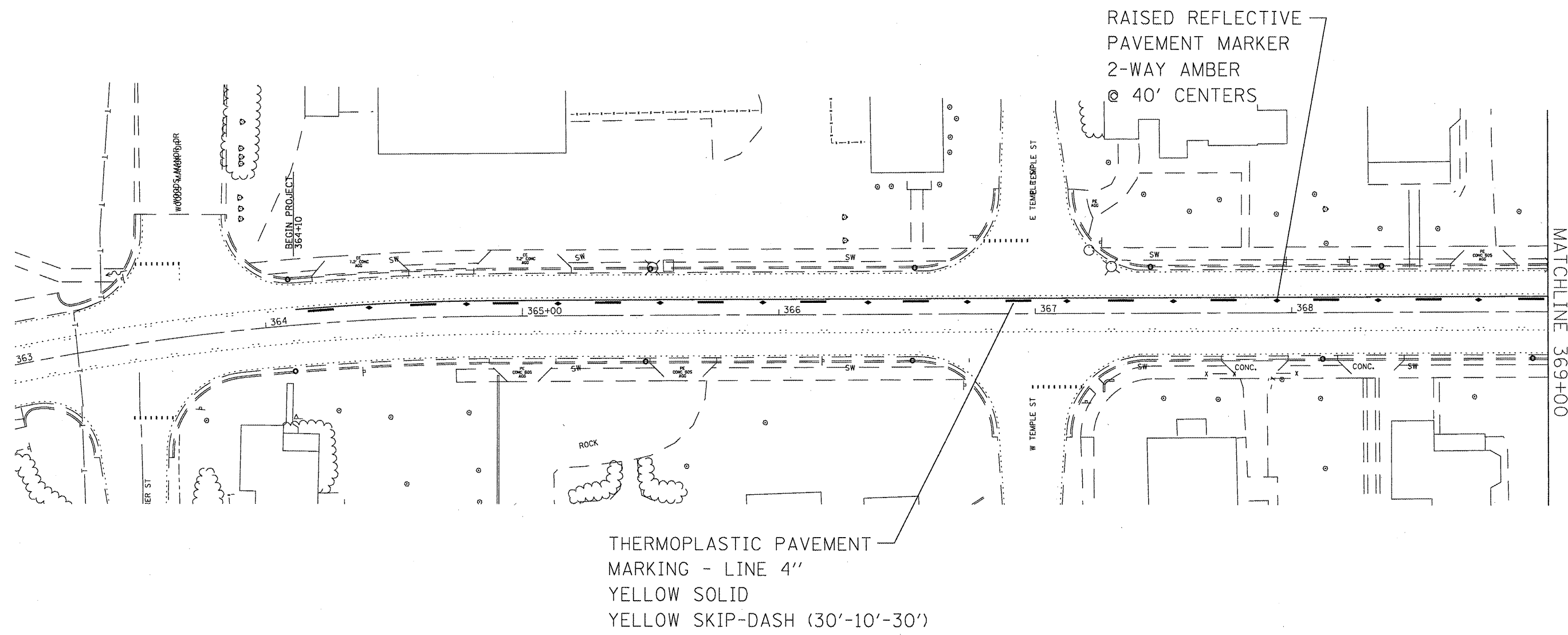


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	PLOT DATE = #DATE*	DATE -	REVISD -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PLAN SHEET</b>		
SCALE: 20	SHEET NO. 7 OF 7 SHEETS	STA. 398+00 TO STA. 404+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	13
FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 76D97	



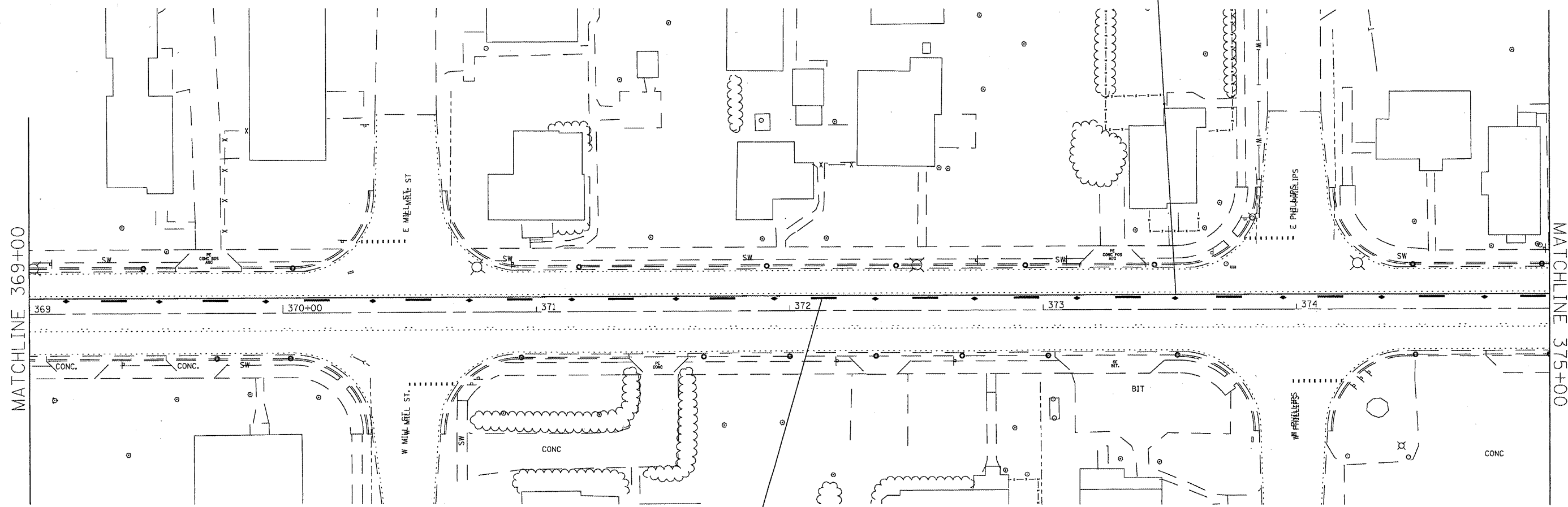
FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING SHEET</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	DRAWN -	REVISED -				103	271-4	ST CLAIR	24	14
	PLOT DATE = #DATE#	CHECKED -	REVISED -				CONTRACT NO. 76D97				
				SCALE: 20-----		SHEET NO. 1 OF 7 SHEETS		STA. 363+00 TO STA. 369+00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



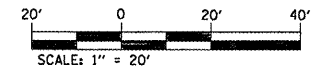
RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS

MATCHLINE 369+00

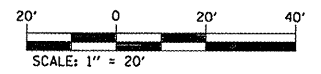
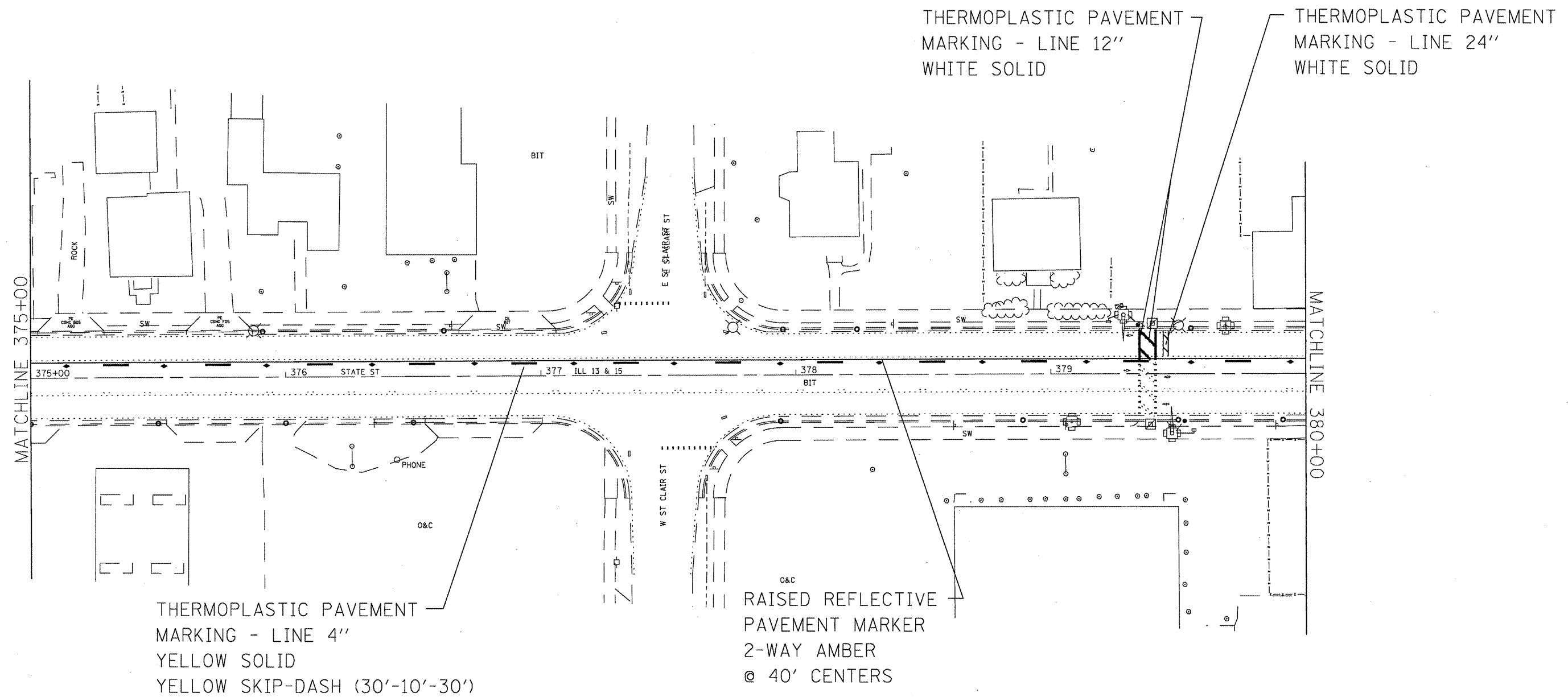
MATCHLINE 375+00



THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
YELLOW SOLID  
YELLOW SKIP-DASH (30'-10'-30')



FILE NAME # #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING SHEET</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -			103	271-4	ST. CLAIR	24	15
	PLOT DATE = #DATE#	DATE -	REVISED -			CONTRACT NO. 76D97				
					SCALE: 20'-----	SHEET NO. 2 OF 7 SHEETS		STA. 369+00 TO STA. 375+00		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
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	PLOT DATE = #DATE#	DATE -	REVISED -

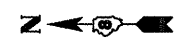
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING SHEET**

SCALE: 20' SHEET NO. 3 OF 7 SHEETS STA. 375+00 TO STA. 380+00

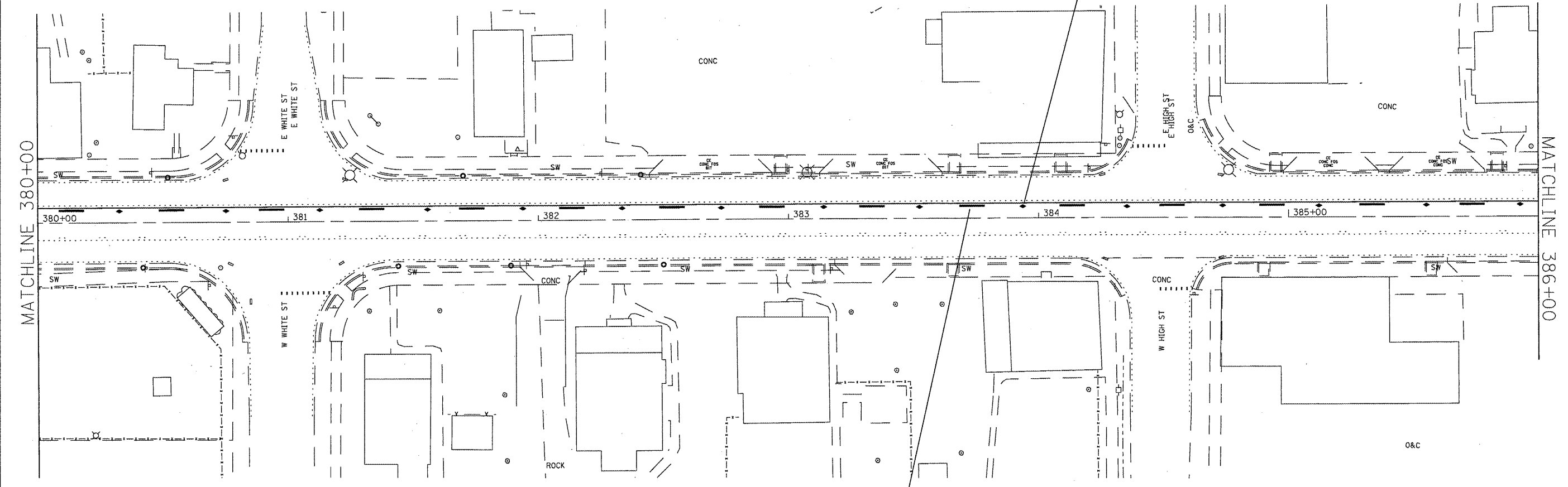
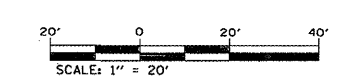
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	16
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	





RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS

THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
YELLOW SOLID  
YELLOW SKIP-DASH (30'-10'-30')



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - ---	REVISED - ---
		DRAWN - ---	REVISED - ---
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

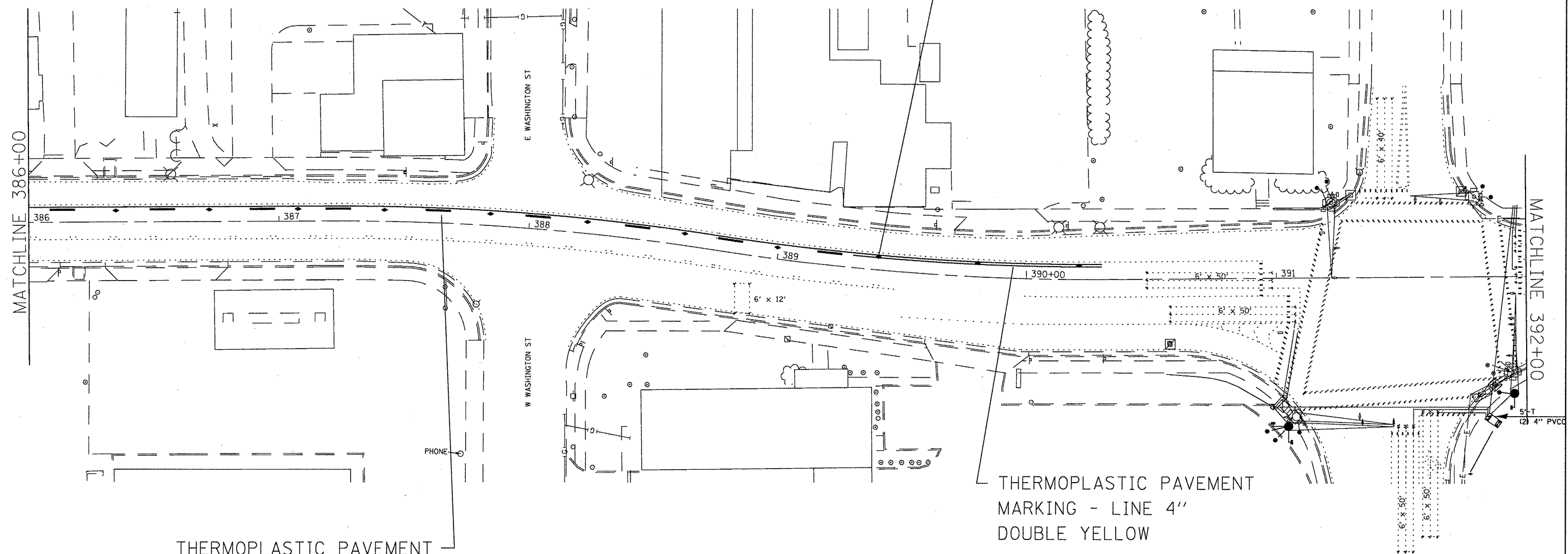
**PAVEMENT MARKING SHEET**

SCALE: 20' SHEET NO. 4 OF 7 SHEETS STA. 380+00 TO STA. 386+00

F.A.P. RTE. #	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	17
CONTRACT NO. 76D97				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

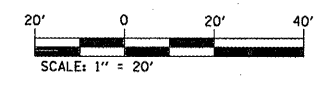


RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS



THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
YELLOW SOLID  
YELLOW SKIP-DASH (30'-10'-30')

THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
DOUBLE YELLOW



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED -	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

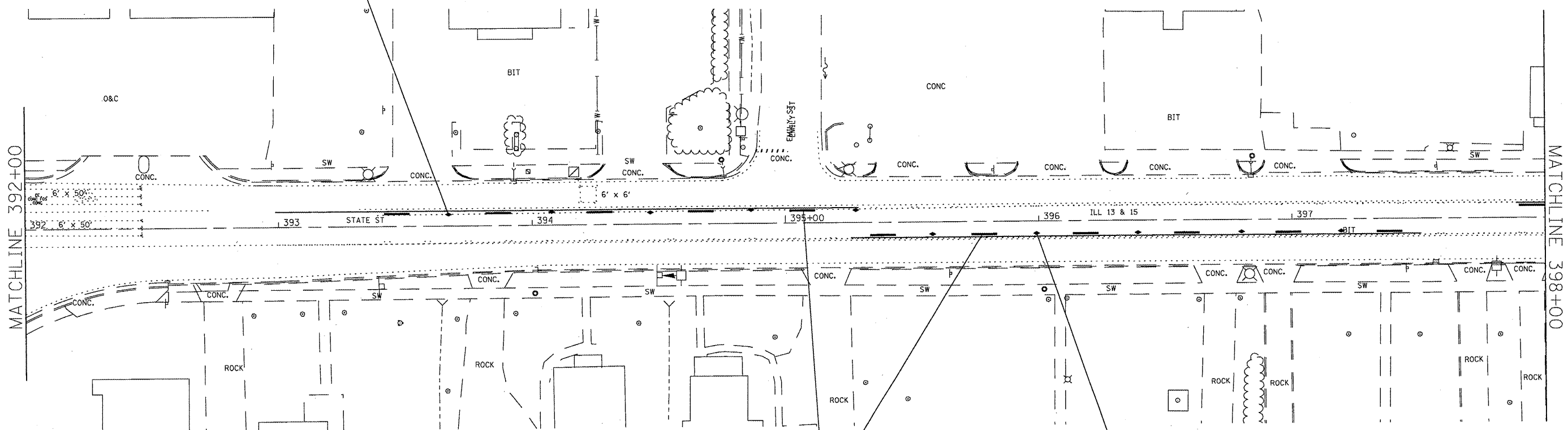
**PAVEMENT MARKING SHEET**

SCALE: 20' SHEET NO. 5 OF 7 SHEETS STA. 386+00 TO STA. 392+00

F.A.P. RTE. 103	SECTION 271-4	COUNTY ST CLAIR	TOTAL SHEETS 24	SHEET NO. 18
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 76D97	

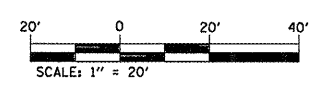


RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS



THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
YELLOW SOLID  
YELLOW SKIP-DASH (30'-10'-30')

RAISED REFLECTIVE  
PAVEMENT MARKER  
1-WAY AMBER  
@ 80' CENTERS



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - ---	REVISED - ---
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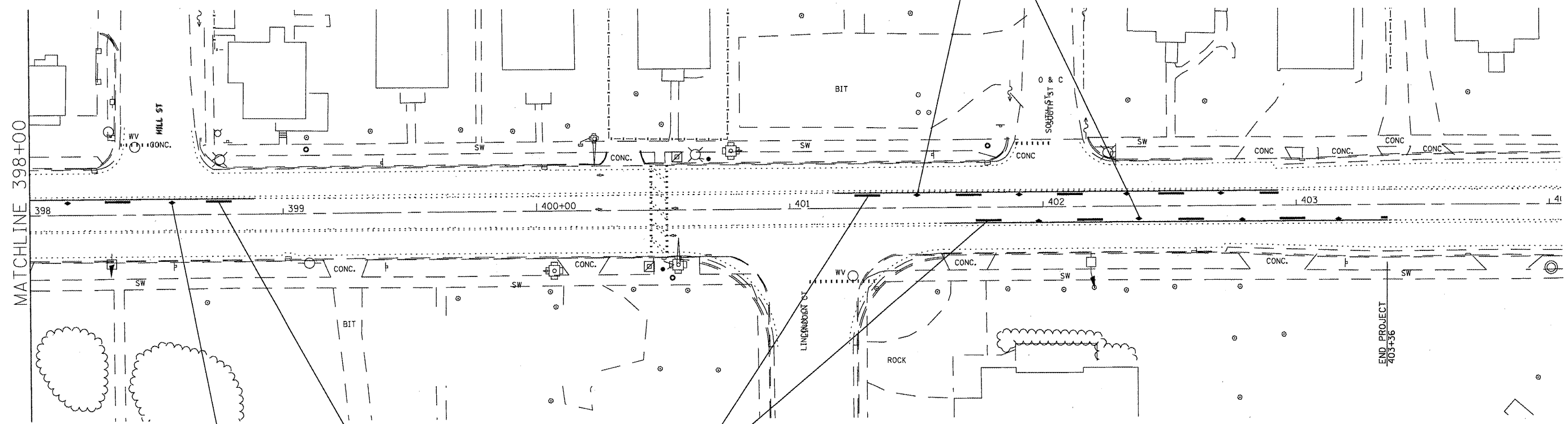
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT MARKING SHEET</b>		
SCALE: 20' = 1"	SHEET NO. 6 OF 7 SHEETS	STA. 392+00 TO STA. 398+00

F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 24	SHEET NO. 19
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	

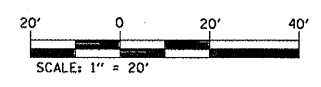


RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS



RAISED REFLECTIVE  
PAVEMENT MARKER  
2-WAY AMBER  
@ 40' CENTERS

THERMOPLASTIC PAVEMENT  
MARKING - LINE 4"  
YELLOW SOLID  
YELLOW SKIP-DASH (30'-10'-30')



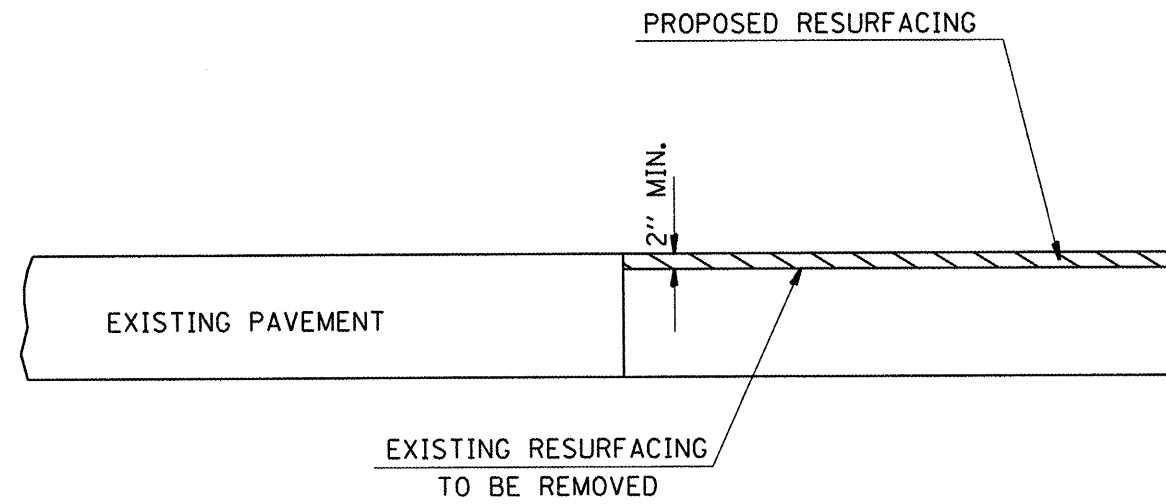
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING SHEET

SCALE: 20' SHEET NO. 7 OF 7 SHEETS STA. 398+00 TO STA. 404+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST CLAIR	24	20
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76D97	

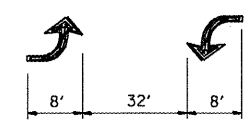
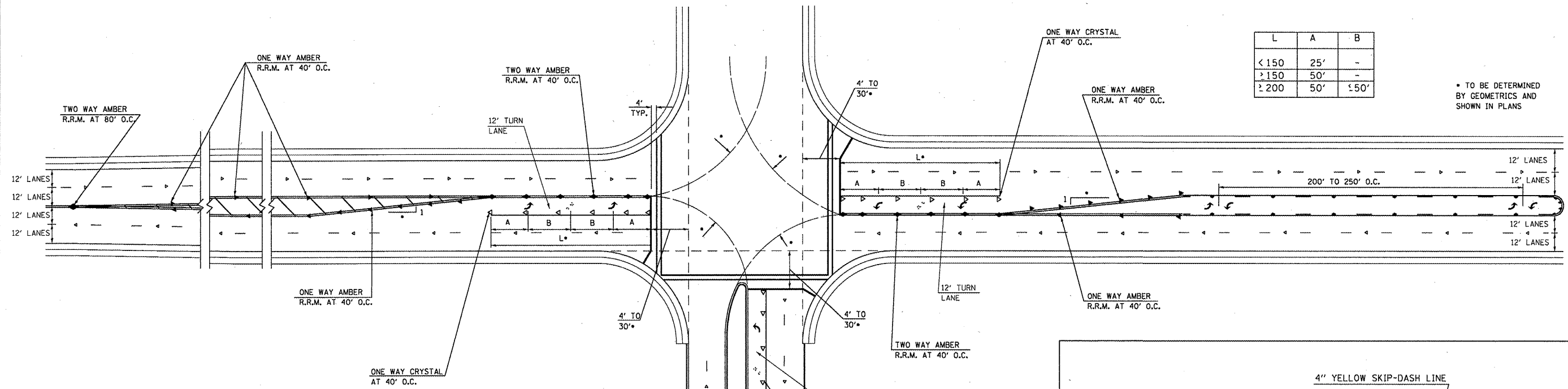


MAINLINE JOINT DETAIL

FILE NAME =	USER NAME = #USER#	DESIGNED - ---	REVISED - ---	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT JOINT DETAIL</b>		F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 24	SHEET NO. 21	
#FILE#		DRAWN - ---	REVISED - ---		SCALE: _____	SHEET NO. 1 OF 1 SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
		CHECKED - ---	REVISED - ---		CONTRACT NO. 76097							
		DATE - -----	REVISED - ---									

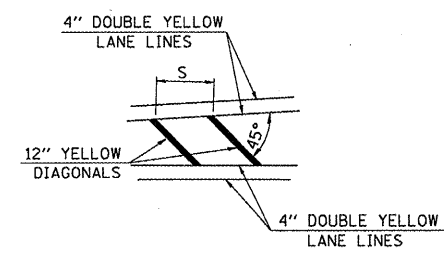
L	A	B
< 150	25'	-
> 150	50'	-
≥ 200	50'	≤ 50'

\* TO BE DETERMINED BY GEOMETRICS AND SHOWN IN PLANS

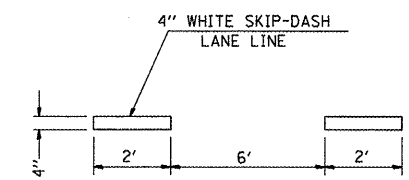


BI-DIRECTIONAL TURN ARROW @ 200' O. C.

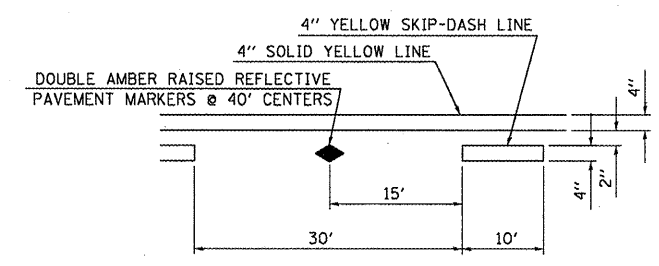
SPEED	CHANNELIZATION & GORES	OBJECTS	CONTINUOUS
< 30 MPH	15'	10'	50'
30-45 MPH	20'	15'	75'
> 45 MPH	30'	20'	150'



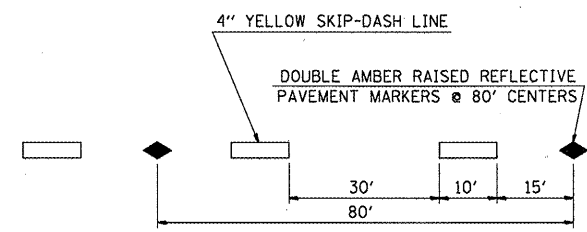
TYPICAL APPLICATION FOR MEDIAN STRIPING



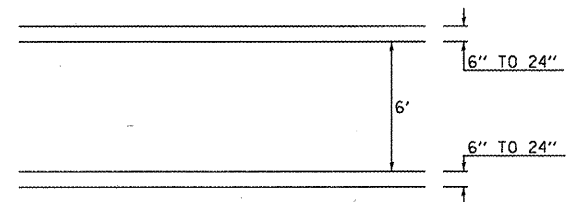
TYPICAL APPLICATION FOR WHITE SKIP-DASH LANE LINES (ABBREVIATED)



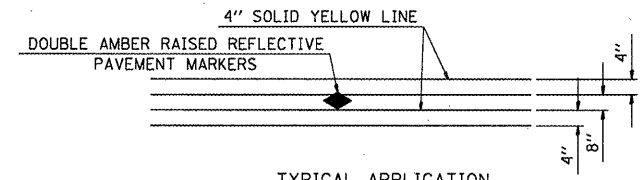
TYPICAL APPLICATION FOR BI-DIRECTIONAL TURN LANE WITH RAISED REFLECTIVE PAVEMENT MARKERS



TYPICAL APPLICATION FOR YELLOW SKIP-DASH LINES WITH RAISED REFLECTIVE PAVEMENT MARKERS

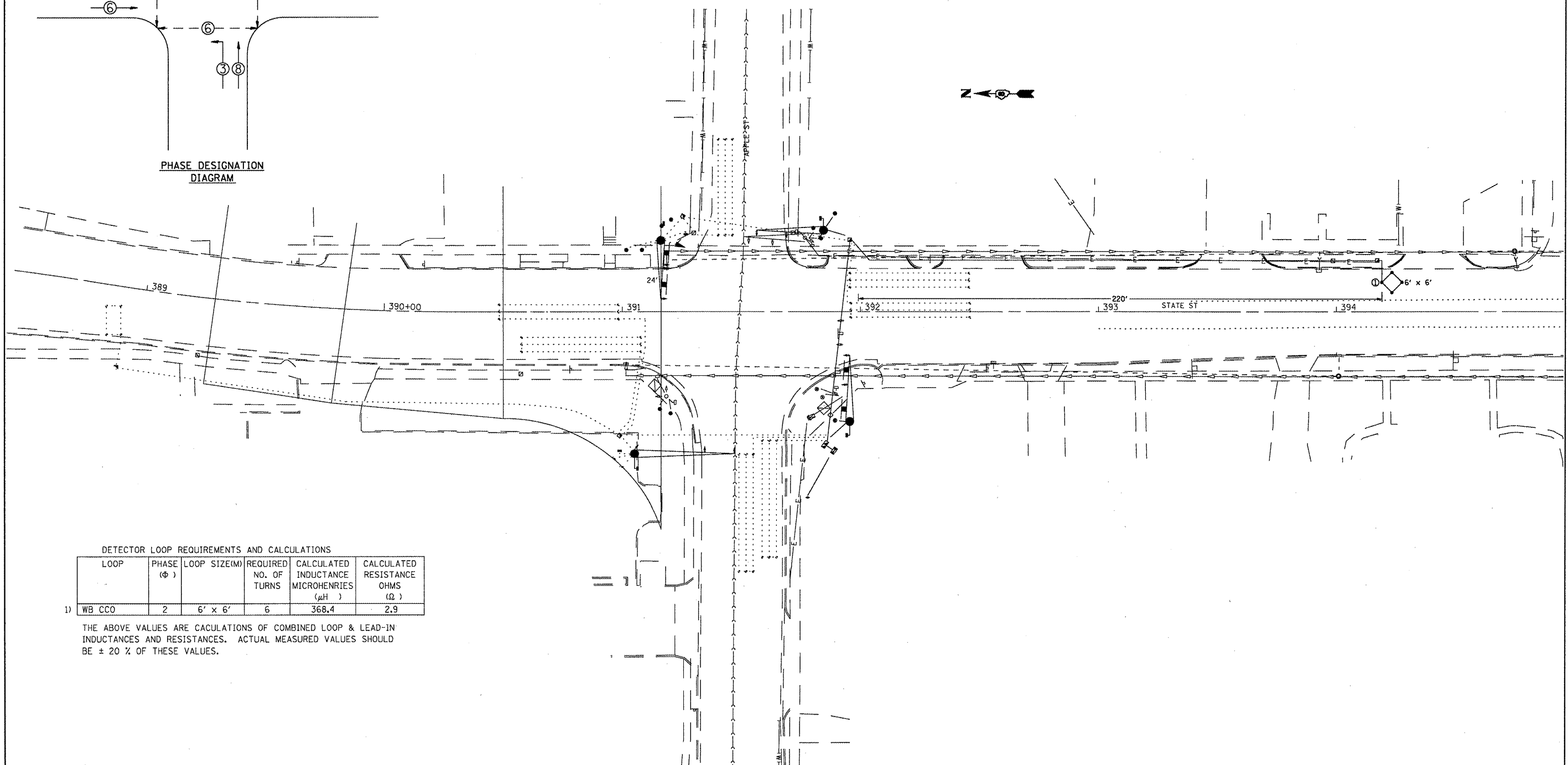
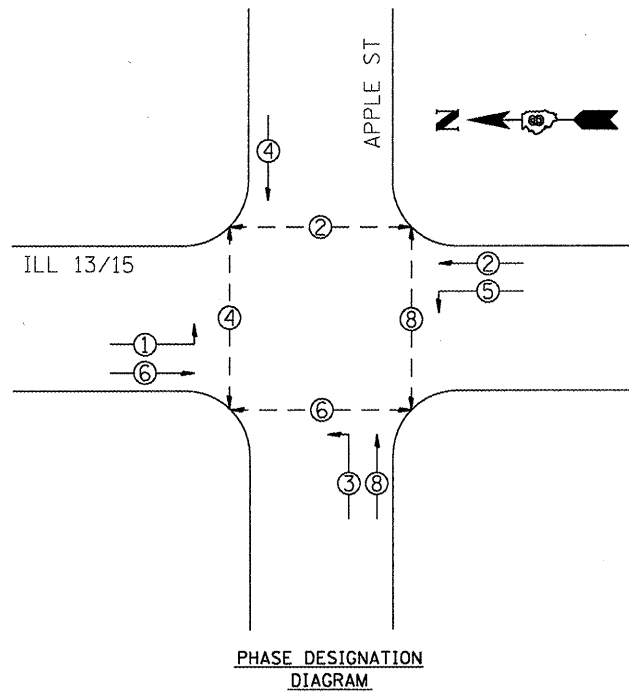


TYPICAL APPLICATION FOR PEDESTRIAN CROSSWALK



TYPICAL APPLICATION FOR DOUBLE YELLOW LANE LINES WITH RAISED REFLECTIVE PAVEMENT MARKERS

FILE NAME =	USER NAME / USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING DETAILS</b>				F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 24	SHEET NO. 22
#FILE#		DRAWN -	REVISED -		SCALE: _____	SHEET NO. 1 OF 1 SHEETS	STA. _____ TO STA. _____	FED. ROAD DIST. NO. _____	ILLINOIS FED. AID PROJECT				
		CHECKED -	REVISED -										
		DATE	REVISED										



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

LOOP	PHASE (Φ)	LOOP SIZE(M)	REQUIRED NO. OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1) WB CCO	2	6' x 6'	6	368.4	2.9

THE ABOVE VALUES ARE CALCULATIONS OF COMBINED LOOP & LEAD-IN INDUCTANCES AND RESISTANCES. ACTUAL MEASURED VALUES SHOULD BE ± 20 % OF THESE VALUES.

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -
#FILE#		DRAWN -	REVISED -
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -
	PLOT DATE = #DATE#	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION  
ILL RTE. 13/15 @ APPLE ST.

F.A.P. RTE. 103	SECTION 271-4	COUNTY ST. CLAIR	TOTAL SHEETS 24	SHEET NO. 23
SCALE: _____			SHEET NO. 1 OF 1 SHEETS	
STA. _____ TO STA. _____			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
CONTRACT NO. 76D97				

	ITEM	UNIT	TOTAL	APPLES ST.
			QUANTITIES	
<del>80306100</del>	LOCATING UNDERGROUND CABLE	FOOT	5	5
<del>88606600</del>	DETECTOR LOOP REPLACEMENT	FOOT	27	27

STANDARDS  
886001-01  
886006-01

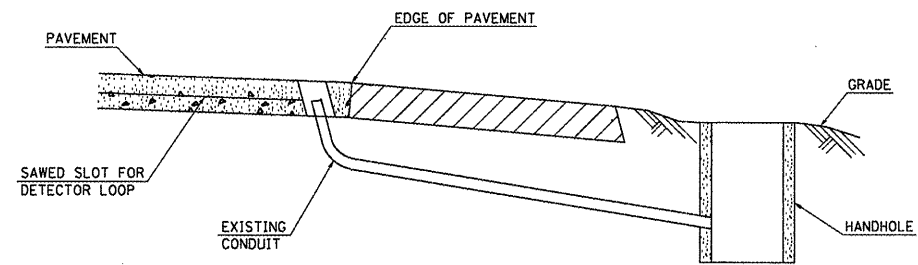
**TRAFFIC SIGNALS LEGEND**

- EVPS EMERGENCY VEHICLE PRIORITY SYSTEM
- GSC GALVANIZED STEEL CONDUIT
- PVCC POLYVINYL CHLORIDE CONDUIT
- UD UNIT-DUCT
- EXISTING SIGNAL POST
- EXISTING SIGNAL POST WITH BACKPLATE
- EXISTING TRAFFIC SIGNAL MAST ARM
- EXISTING HANDHOLE
- EXISTING DOUBLE HANDHOLE
- EXISTING HEAVEY DUTY HANDHOLE
- EXISTING DETECTOR LOOP
- EXISTING CONTROLLER
- EXISTING STREET NAME SIGN/TRAFFIC SIGN
- EXISTING ILLUMINATED SIGN
- EXISTING SERVICE INSTALLATION
- EXISTING EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)
- EXISTING (E.V.P.S.) CONFIRMATION BEACON
- EXISTING SIGNAL HEAD, PEDESTRIAN
- EXISTING PEDESTRIAN PUSHBUTTON DETECTOR
- EXISTING GALVANIZED STEEL CONDUIT
- PROPOSED SIGNAL HEAD WITH BACKPLATE, MAST ARM MOUNTED
- PROPOSED EMERGENCY VEHICLE SYSTEM DETECTOR (E.V.P.S.)
- PROPOSED (E.V.P.S.) CONFIRMATION BEACON
- PROPOSED HANDHOLE
- PROPOSED DOUBLE HANDHOLE
- PROPOSED HEAVEY DUTY HANDHOLE
- PROPOSED DETECTOR LOOP
- PROPOSED CONTROLLER
- PROPOSED PEDESTRIAN PUSHBUTTON DETECTOR
- PROPOSED SIGNAL HEAD, PEDESTRIAN
- PROPOSED CONDUIT: "T" TRENCH, "P" PUSH, SIZE SPECIFIED
- PROPOSED STREET NAME SIGN/TRAFFIC SIGN
- PROPOSED ILLUMINATED SIGN
- PROPOSED SERVICE INSTALLATION
- PROPOSED SIGNAL POST
- PROPOSED SIGNAL POST WITH BACKPLATE

NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

SEE "ELECTRICAL DETAIL" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.



**DETAIL**  
(NO SCALE)  
**RE-USE EXISTING DETECTOR LOOP LEAD-IN CONDUIT**

- 1 DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
- 2 REMOVE EXISTING CABLE TO HANDHOLE.
- 3 INSTALL LOOP LEAD-IN CONDUCTORS IN CONDUIT.
- 4 SPLICE NEW DETECTOR LOOP LEAD-IN CONDUCTORS TO EXISTING LEAD-IN CABLE IN HANDHOLE.
- 5 FILL HOLE WITH APPROVED SEALER, PREVENT SEALER FROM ENTERING INTO CONDUIT.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"

FILE NAME =	USER NAME = #USER#	DESIGNED - ---	REVISED - ---
#FILE#		DRAWN - ---	REVISED - ---
	PLOT SCALE = #SCALE#	CHECKED - ---	REVISED - ---
	PLOT DATE = #DATE#	DATE - -----	REVISED - ---

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION**  
**ILL. RTE. 13/15 @ APPLE ST.**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	271-4	ST. CLAIR	24	24
SCALE: _____			SHEET NO. 1 OF 1 SHEETS	
STA. _____ TO STA. _____			CONTRACT NO. 76D97	
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				