FOR INDEX OF SHEETS, SEE SHEET NO. 2

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

DESIGN DESIGNATION:

POSTED SPEED: 30 TO 50 M.P.H.

PROJECT LOCATED IN THE CITY OF NORTH CHICAGO

2008 ADT = 23,000

PROPOSED HIGHWAY PLANS

F.A.P. 352 / IL 137

SECTION: 56 RS-8

MARTIN LUTHER KING DRIVE TO WEST OF U.S. 41

RESURFACING (3P)

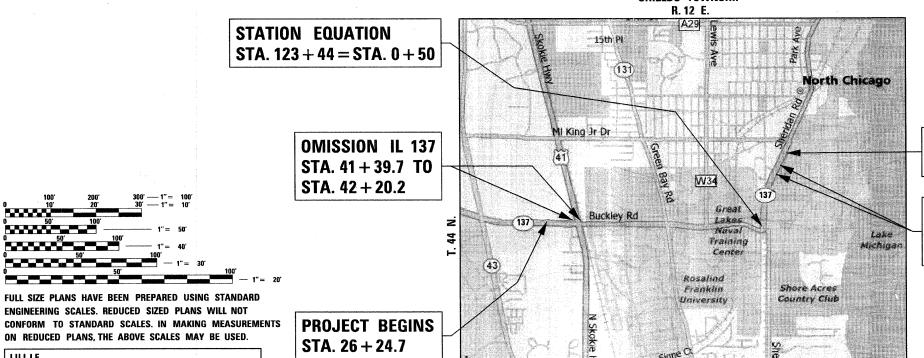
PROJECT: ESP-0352 (012)

LAKE COUNTY C-91-344-08

SHIELDS TOWNSHIP

GROSS LENGTH OF PROJECT = 13,595.30 FEET = 2.575 MILES

NET LENGTH OF PROJECT = 13,214.80 FEET = 2.503 MILES



PROJECT ENDS STA. 39 + 26

OMISSION IL 137 STA. 27 + 00 TOSTA. 30 + 00

D-91-344-08



DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS SUBMITTED JANUARY 9, 2009 Director of Highways, REGION ONE ENGINEER

STATE OF ILLINOIS

Birider S. Sachdeva BIRINDER S. SACHDEVA, P.E. EXPIRES: 11-30-2009

January 8, 2009 DATE

DESIGN SECTION ENGINEER



CHRISTIAN-ROGE & ASSOCIATES INC. ENGINEERS - PLANNERS - SURVEYORS 211 W. WACKER DRIVE CHICAGO, IL. 60606

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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 \circ

CONTRACT NO. 60E23

1-800-892-0123

OR 811

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS

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2	INDEX OF SHEETS, LIST OF STATE STANDARDS AND GENERAL NOTES
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4	TYPICAL SECTIONS IL 137 (BUCKLEY RD.)
5 - 12	ROADWAY AND PAVEMENT MARKING PLAN IL 137 (BUCKLEY RD.)
13 - 21	DETECTOR LOOP REPLACEMENT PLANS IL 137 (BUCKLEY RD.)
22	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
23	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
25	BUTT JOINT AND HMA TAPER DETAILS
26	HMA TAPER AT EDGE OF PCC PAVEMENT
27	TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE AND MULTI-LANE WEAVE
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31	MULTI-LANE FREEWAY PAVEMENT MARKING DETAILS (SHEET 2 OF 2)
32	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
33	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
34	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
35	TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
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37	TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING TREATMENT FOR RAILROAD CROSSINGS
38	TRAFFIC CONTROL DETAILS FOR FREEWAY CENTER LANE CLOSURE SHOULDER LANE
39	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

LIST OF STATE STANDARDS

STANDARD NO.	DESCRIPTION
000001- <i>os</i>	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
442201 - <i>03</i>	CLASS C AND D PATCHES
604001-a3	FRAME AND LIDS, TYPE 1
606001 <i>-04</i>	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701406 <i>-05</i>	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
•701602 •	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701- 06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701901-0/	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- 2. 10 FEET TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER ITEMS OF WORK TO EXISTING CURBS AND GUTTERS AND CONDITIONS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.
- 3. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, GREAT LAKES NAVAL TRAINING CENTER AND THE CITY OF NORTH CHICAGO.
- 4. WHEN ARTIFICIAL LIGHTING IS USED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
- 5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 6. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- 7. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 8. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 9. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC, THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2 INCHES (40 MM) WHERE THE SPEED LIMIT IS 40 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 10. UNLESS OTHER CONDITIONS WARRANT EXTENDED LANE CLOSURE AS DETERMINED AND APPROVED IN WRITING BY THE ENGINEER OR AS PROVIDED FOR IN THE CONTRACT SPECIFICATIONS, OVERNIGHT CLOSURES SHALL NOT BE ALLOWED FOR REHABILITATION PROJECTS INVOLVING DAYTIME MILLING AND RESURFACING OPERATIONS AND CLASS D PATCHING.
- 11. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.
- 12. THE CONTRACTOR SHALL CONTACT DEBBIE HANLON, THE AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300 AT LEAST TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 13. BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND HMA TAPER DETAILS" INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
- 14. REFER TO THE DISTRICT ONE TYPICAL PAVEMENT MARKINGS FOR DETAILS NOT SHOWN.
- 15. MATCH EXISTING PAVEMENT MARKINGS AT THE PROJECT AND OMISSION LIMITS. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- 16. TEMPORARY RAMPS AT BUTT JOINTS SHALL BE INCLUDED IN THE COST OF THE BUTT JOINT AS SHOWN ON THE BUTT JOINT DETAIL SHEET.
- 17. PARTIAL DEPTH LONGITUDINAL PATCHES SHALL BE 3' WIDE BY 3" DEEP AND SHALL BE USED ON LONGITUDINAL JOINTS WITH A LARGE SEPARATION OR JOINTS PREVIOUSLY FILLED WITH COLD PATCH.
- 18. THE CONTRACTOR SHALL COORDINATE THE SUSPENSION OF ALL WORK ON THE PROJECT, BETWEEN THE WESTERLY LIMIT AND GREEN BAY ROAD, FOR A TWO WEEK PERIOD DURING THE DETOUR OF IL. RTE. 176 TRAFFIC ON TO IL. RTE. 137. SEE THE SPECIAL PROVISION "IL. RTE 176 DETOUR COORDINATION" FOR ADDITIONAL DETAILS.
- 19. THE CONTRACTOR SHALL COORDINATE THE WORK ACTIVITIES WITH THE GREAT LAKES NAVAL STATION. IN ADDITION, WORK ACTIVITIES SHALL BE RESTRICTED, AS DIRECTED BY THE ENGINEER, ON FRIDAYS DURING GRADUATION CEREMONIES. SEE THE SPECIAL PROVISION "GREAT LAKES NAVAL STATION COORDINATION" FOR ADDITIONAL DETAILS.

FILE NAME = D160E23-sht-gennote.dg

CHRISTIAN-ROGE & ASSOCIATES, IN
ENGINEERS-PLANNERS-SURVEYOR:
211 WEST WACKER DRIVE
CHICAGO, ILLINOIS 60606
PHONE: (312)372-2023 FAX: (312)372-1

NC.	DESIGNED	-	K.R.K.	REVISED -
is .	DRAWN	-	A.C.S.	REVISED -
	CHECKED	-	S.J.P.	REVISED -
-5274		-	JANUARY 13, 2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SH	EETS. LIST OF	STATE STAP	NDARDS AND	GENERAL	NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	IL 1	37 (BUCKLEY	ROAD)			352	56 RS-8	LAKE	39	2
		o. (Doorer.			CONTRACT	NO. 6	0E23			
SCALE: NONE	SHEET NO. 1 0	F 1 SHEETS	STA.	TO STA.		FED. RO	AD DIST. NO. 1 ILLINOIS FED.	AID PROJECT		

URBAN 100% FED CONSTRUCTION TYPE CODE SUMMARY OF QUANTITIES TOTAL I000-2A CODE NO ITEM UNIT QUANTITIES TON 93 93 40600200 BITUMINOUS MATERIALS (PRIME COAT) 40600300 AGGREGATE (PRIME COAT) TON 528 528 MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS TON 106 40600400 106 40600895 CONSTRUCTING TEST STRIP EACH HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT SQ YD 658 658 40600982 40600985 PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT SQ YD 2,204 2,204 40601005 HOT-MIX ASPHALT REPLACEMENT OVER PATCHES TON 2,118 2,118 40603085 HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 TON 156 156 40603340 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 TON 12,944 12,944 42001300 PROTECTIVE COAT SQ YD 569 569 44000159 HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2" SQ YD 106,611 106,611 COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND 44001700 FOOT 1,982 1,982 REPLACEMENT 44002220 HOT-MIX ASPHALT REMOVAL OVER PATCHES, 5" SQ YD 7,565 7,565 44201765 CLASS D PATCHES, TYPE II, 10 INCH SQ YD 2,916 2,916 44201769 CLASS D PATCHES, TYPE III, 10 INCH SQ YD 439 439 44201771 CLASS D PATCHES, TYPE IV, 10 INCH SQ YD 1,019 1,019 44201815 CLASS D PATCHES, TYPE II, 14 INCH SQ YD 25 25 44201819 CLASS D PATCHES, TYPE III, 14 INCH SQ YD 250 250 44201821 CLASS D PATCHES, TYPE IV. 14 INCH SQ YD 3,621 3,621 55039700 STORM SEWERS TO BE CLEANED FOOT 7,000 7,000 60252800 CATCH BASINS TO BE RECONSTRUCTED EACH 60257900 MANHOLES TO BE RECONSTRUCTED EACH 60300310 FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) EACH 47 47 60404950 FRAMES AND GRATES, TYPE 24 EACH 10 10 FRAMES AND LIDS. TYPE 1. CLOSED LID 60406100 EACH 10 10 67000400 ENGINEER'S FIELD OFFICE, TYPE A CAL MO 67100100 MOBILIZATION L SUM TRAFFIC CONTROL AND PROTECTION, STANDARD
TRAFFIC CONTROL AND PROTECTION, STANDARD 701602 701404 10100700 L SUM 70102632 TRAFFIC CONTROL AND PROTECTION, STANDARD 701606 70102625 L SUM 7. FIC CONTROL AND PROTECTION, STANDARD 701701 70102635 L SUM

		SUMMARY OF QUANTITIES		OHIDIN	CONSTRUCTION TYPE CODE
	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	I000-2A
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	48,000	48,000
	70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	4,358	4,358
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	82,638	82,638
	70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	3,358	3,358
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	14,666	14,666
	70300250	TEMPORARY PAVEMENT MARKING - LINE 8"	FOOT	12,772	12,772
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	2,216	2,216
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	2,796	2,796
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	16,000	16,000
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	2,179	2,179
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	41,319	41,319
*	78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	1,679	1,679
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	7,333	7,333
*	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	6,386	6,386
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1,108	1,108
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	1,398	1,398
*	78100100	RAISED RE-LECTIVE PAVEMENT MARKER	EACH	894	894
	78300200	RAISED RE-LECTIVE PAVEMENT MARKER REMOVAL	EACH	894	894
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	6,515	6,515
	X0322256	TEMPORAR INFORMATION SIGNING	SQ FT	52	52
	X4067107	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	5,547	5,547
	X4400100	PORTLAND CEMENT CONCRETE SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD	4,579	4,579
	X4422030	PARTIAL DEPTH REMOVAL 3"	SQ YD	930	930
\triangle	Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH .	175	175
	Z0048665	RAILROAL PROTECTIVE LIABILITY INSURANCE	L SUM	14	1
0	Z0076600	TRAINEES	HOUR	1500	1500

A = NON - PARTICIPATING 100% STATE

LE NAME = D16ØE23-sht-S0Q.dgn T DATE = 1/13/2009

REVISED REVISED REVISED HONE: (312)372-2023 FAX: (312)372-5274 DATE JANUARY 13, 2009 REVISED

* SPECIALTY ITEM @ Y080

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

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I					IL	137	(1	BUCKLEY	ROAD)	
ŀ	SCALE	NONE	SHEET	NO.	1	OF	1	SHEETS	STA.	

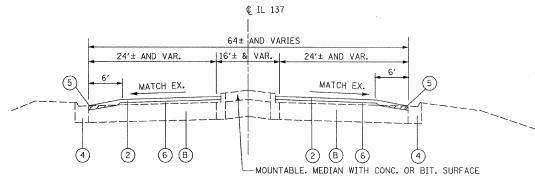
TO STA.

SHEETS NO. 352 LAKE CONTRACT NO. 6CE23

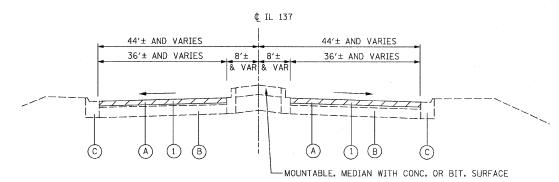
URBAN 1002 FED

	HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
ROADWAY NAME	MIXTURE TYPE	AC TYPE	AIR VOIDS
	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	PG 64-22	4% @ 70 GYR
TI 137	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	SBS/SBR PG 76-28/22	4% © 50 GYR
IL 131	CLASS D PATCHES (HMA BINDER, IL-19)	* PG 64-22	4% @ 70 GYR.
	HMA REPLACEMENT OVER PATCHES (HMA BINDER, IL-19)	* PG 64-22	4% @ 70 GYR.

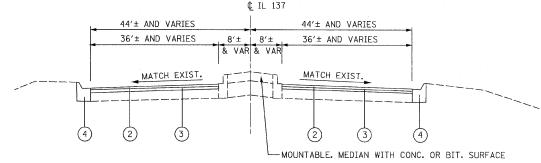
* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22. THE UNIT WEIGHT USED TO CALCULATE ALL HMA MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.



EXISTING & PROPOSED TYPICAL SECTION * STA. 35+06 TO STA. 41+39.7 STA. 42+20.2 TO STA. 66+00



EXISTING TYPICAL SECTION * STA. 26+24.7 TO STA. 35+06 STA. 66+00 TO STA. 124+19



PROPOSED TYPICAL SECTION STA. 26+24.7 TO STA. 35+06 STA. 66+00 TO STA. 124+19

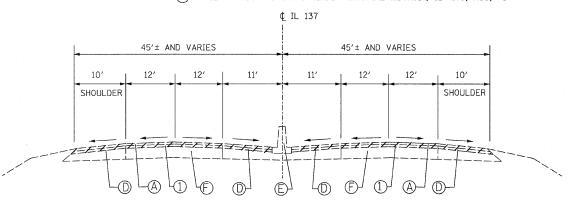
* THE CONTRACTOR SHALL PATCH FIRST BEFORE MILLING.

EXISTING CONDITIONS:

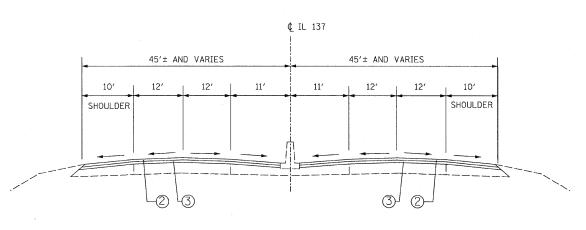
- BUCKLEY ROAD, 3" A HOT-MIX ASPHALT SURFACE AND BINDER COURSE AMSTUTZ EXPRESSWAY, 1/2"
- P.C.C. PAVEMENT, 10"
- C COMBINATION CONCRETE CURB AND GUTTER
- D BITUMINOUS SHOULDER, 10"
- E CONC. BARRIER MEDIAN
- HOT-MIX ASPHALT BINDER COURSE, 121/2"

PROPOSED IMPROVEMENTS:

- 1 HOT-MIX ASPHALT SURFACE REMOVAL, 21/2"
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 13/4"
- 3 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (4) COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT
- P.C.C. SURFACE REMOVAL VARIABLE DEPTH (SEE HMA TAPER AT EDGE OF P.C.C. PAVEMENT DETAIL)
- 6 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"



EXISTING TYPICAL SECTION * STA. 0+50 TO STA. 39+26 (OMISSION STA. 27+00 TO 30+00, APPROACH SLAB AND BRIDGE)



PROPOSED TYPICAL SECTION STA. 0+50 TO STA. 39+26

(OMISSION STA. 27+00 TO 30+00, APPROACH SLAB AND BRIDGE)

FILE NAME = D16ØE23-sht-typical.o PLOT DATE = 2/10/2009

CHRISTIAN-ROGE & ASSOCIATES, INC. DESIGNED - K.R.K. 211 WEST WACKER DRIVE PHONE: (312)372-2023 FAX: (312)372-5274 DATE

REVISED DRAWN REVISED CHECKED - S.J.P. REVISED FEBRUARY 10, 2009 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTIONS	F.A.P. RTE.	SECTION	
IL 137 (BUCKLEY ROAD /AMSTUTZ EXPRESSWAY)	352	56 RS-8	
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ALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	DAD DIST. NO. 1 TILINOIS FED. AL	m

COUNTY TOTAL SHEET NO.

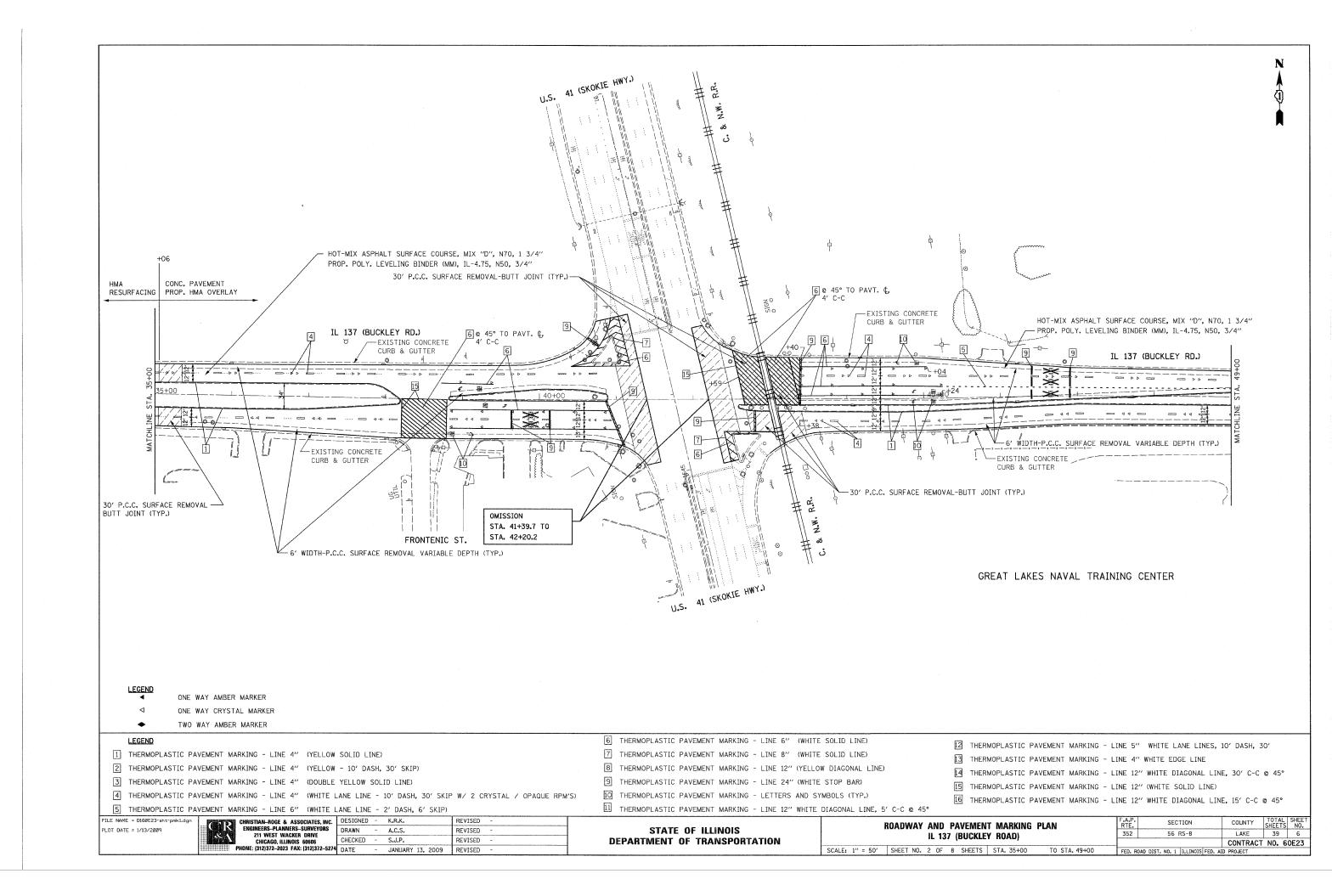
LAKE 39 4

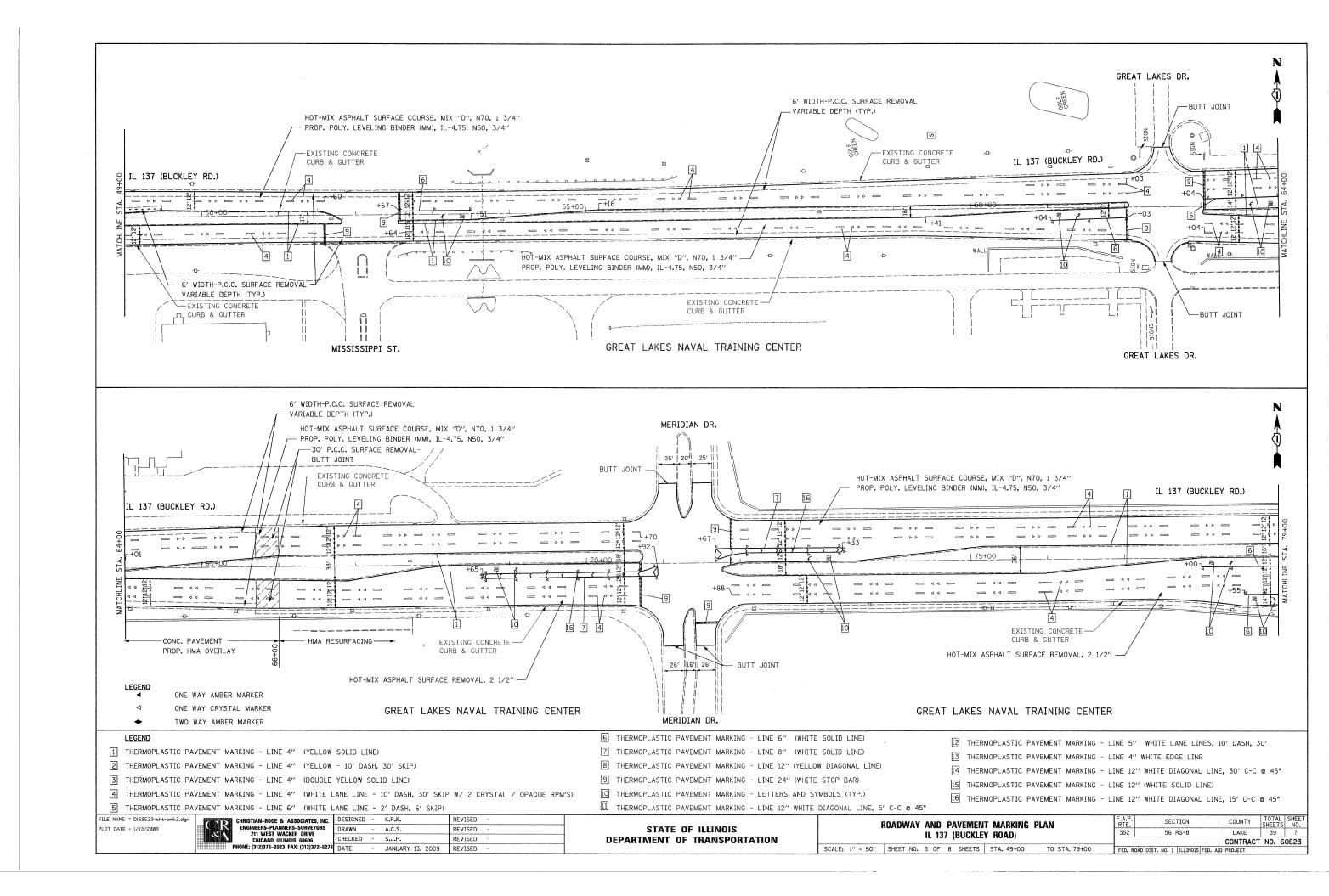
CONTRACT NO. 60E23

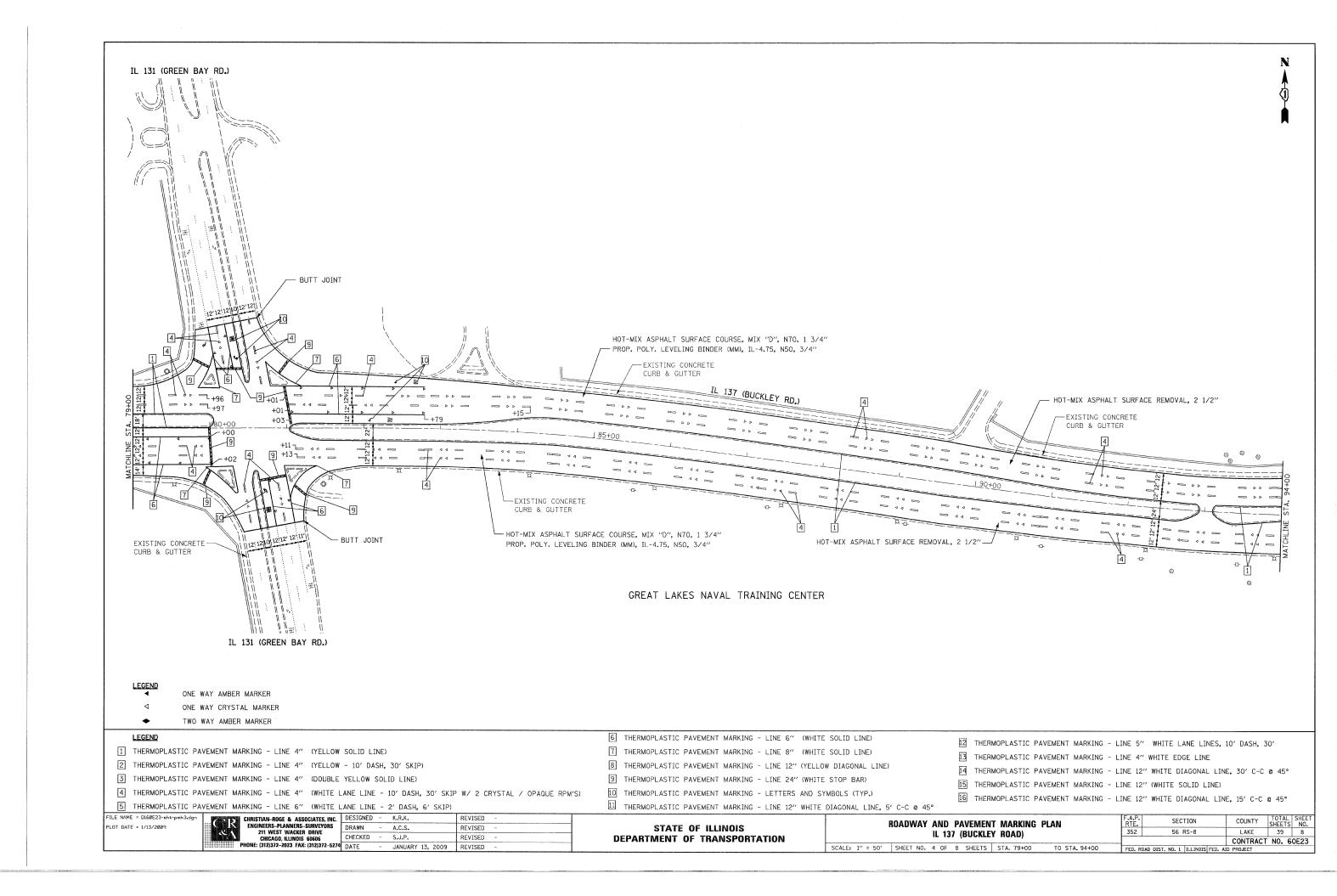
COUNTY

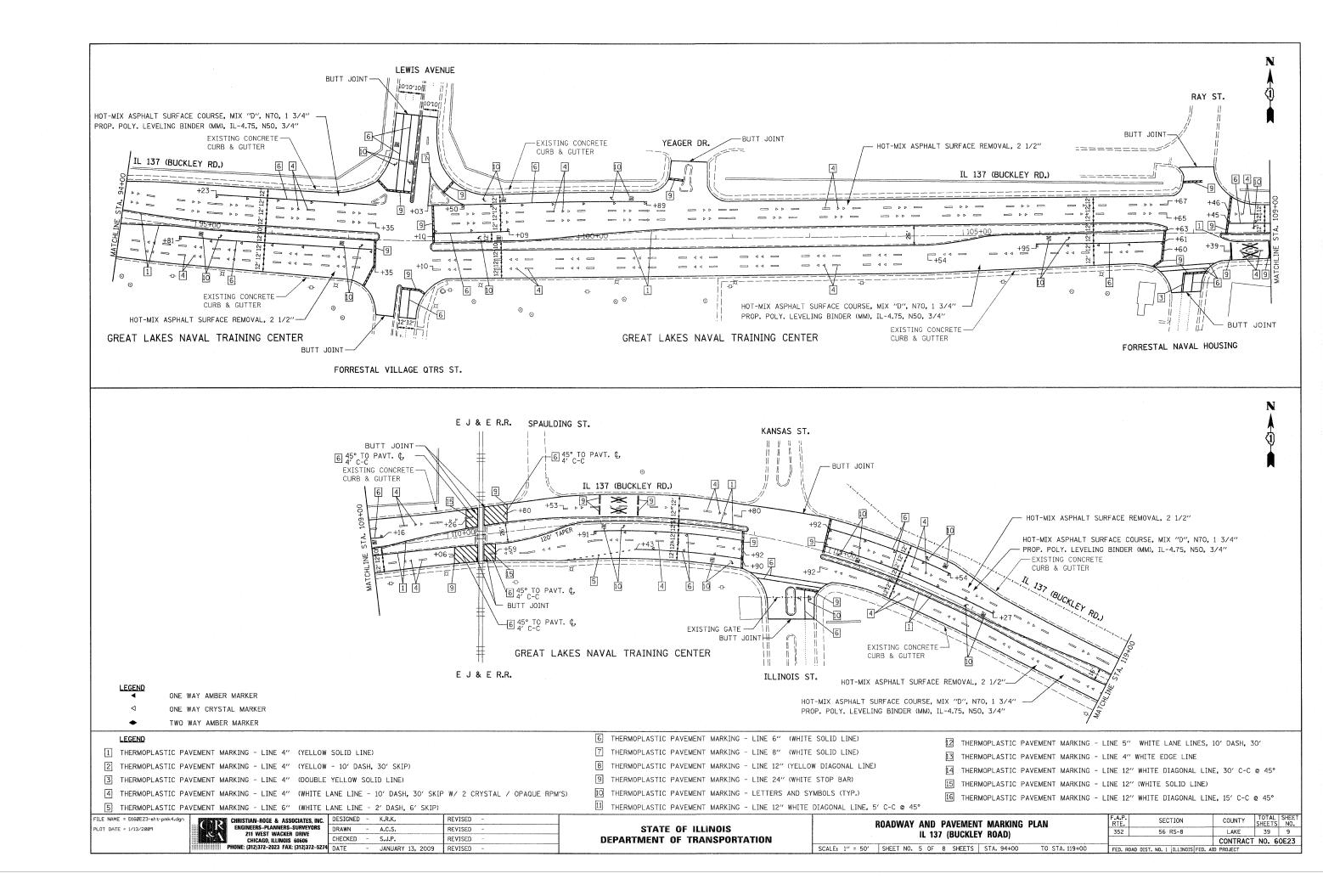
PROJECT BEGINS STA. 26+24.7 - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 1 3/4" IL 137 (BUCKLEY RD.) PROP. POLY. LEVELING BINDER (MM), IL-4.75, N50, 3/4" -BUTT JOINT HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"-LEGEND ONE WAY AMBER MARKER ONE WAY CRYSTAL MARKER TWO WAY AMBER MARKER 6 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE SOLID LINE) 12 THERMOPLASTIC PAVEMENT MARKING - LINE 5" WHITE LANE LINES, 10' DASH, 30' 7 THERMOPLASTIC PAVEMENT MARKING - LINE 8" (WHITE SOLID LINE) 1 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW SOLID LINE) 13 THERMOPLASTIC PAVEMENT MARKING - LINE 4" WHITE EDGE LINE 2 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW - 10' DASH, 30' SKIP) 8 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW DIAGONAL LINE) 14 THERMOPLASTIC PAVEMENT MARKING - LINE 12" WHITE DIAGONAL LINE, 30' C-C @ 45° 3 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW SOLID LINE) 9 THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE STOP BAR) 15 THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE SOLID LINE) 4 THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE LANE LINE - 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RPM'S) 10 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (TYP.) 16 THERMOPLASTIC PAVEMENT MARKING - LINE 12" WHITE DIAGONAL LINE, 15' C-C @ 45° THERMOPLASTIC PAVEMENT MARKING - LINE 12" WHITE DIAGONAL LINE, 5' C-C @ 45° 5 THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE LANE LINE - 2' DASH, 6' SKIP) CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS-PLANNERS-SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 CHICAGO, ILLINOIS 60606 CHICAGO, ILLINOIS 60606 COUNTY TOTAL SHEE SHEETS NO.

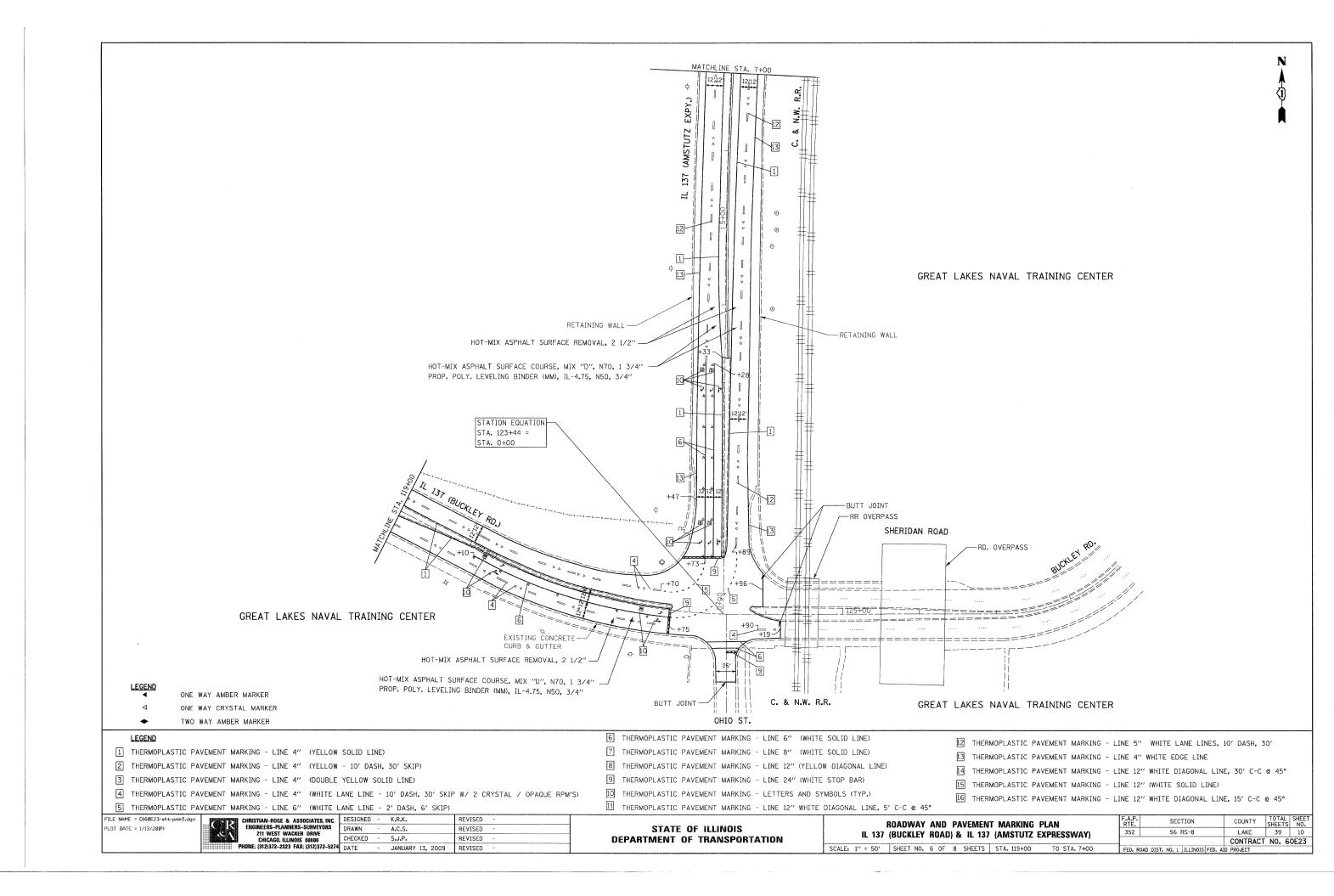
LAKE 39 5 ROADWAY AND PAVEMENT MARKING PLAN PLOT DATE = 1/13/2009 STATE OF ILLINOIS REVISED -IL 137 (BUCKLEY ROAD) REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 60E23 PHONE: (312)372-2023 FAX: (312)372-5274 DATE - JANUARY 13, 2009 REVISED SCALE: 1" = 50' SHEET NO. 1 OF 8 SHEETS STA. 26+24.7 TO STA. 35+00

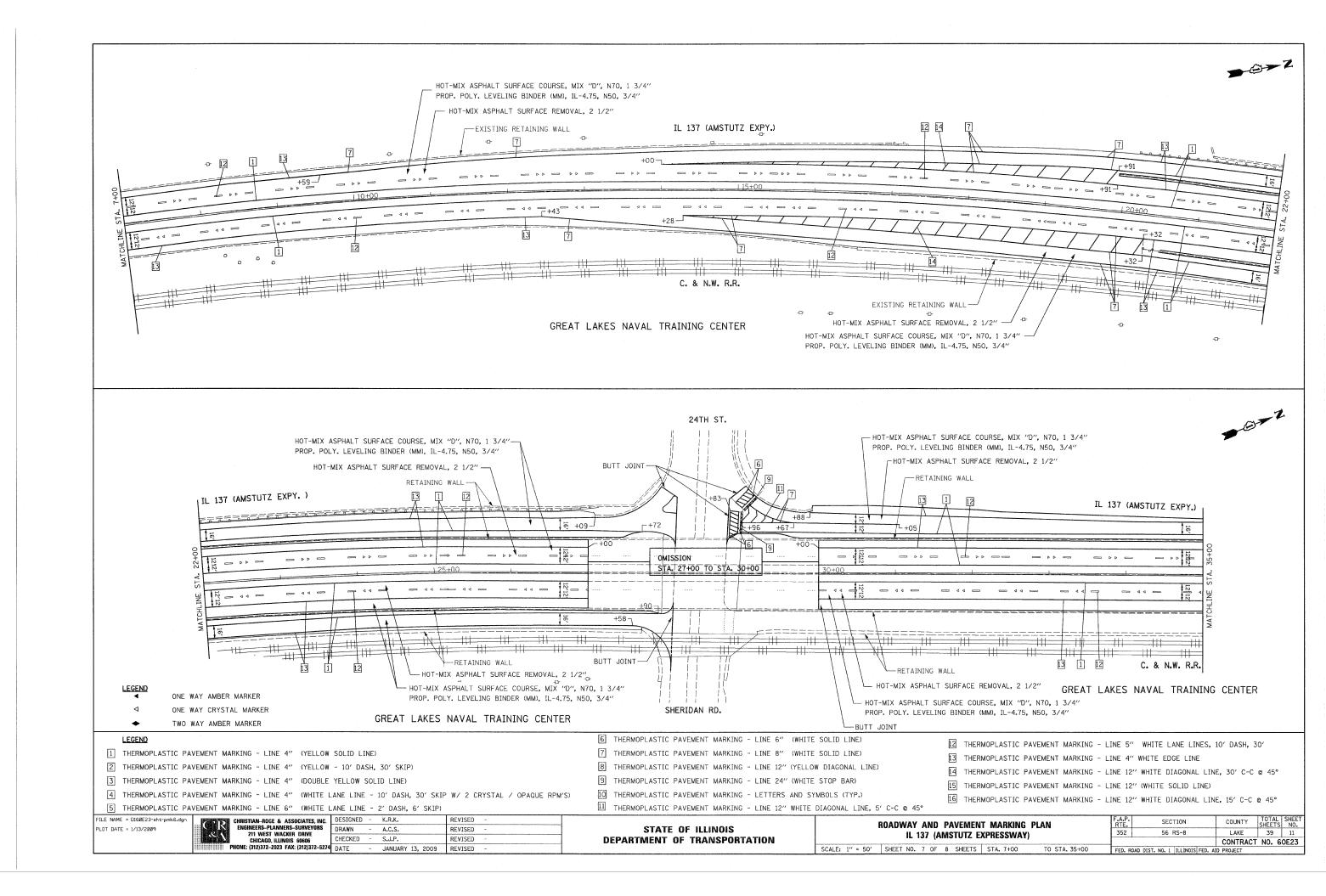


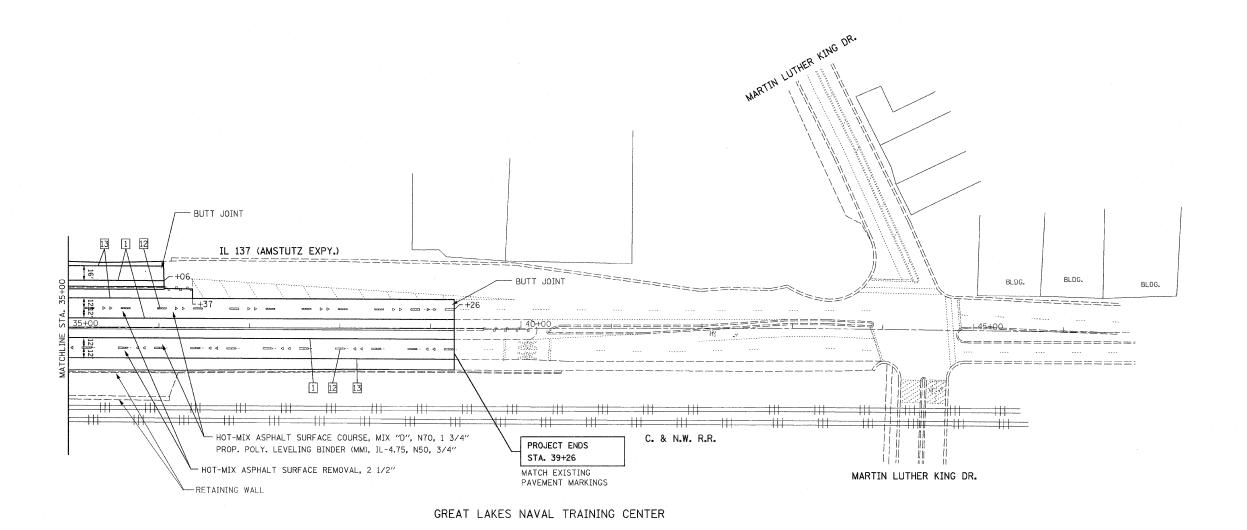












LEGEND ◀

ONE WAY AMBER MARKER

ONE WAY CRYSTAL MARKER

TWO WAY AMBER MARKER

- 1 THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW SOLID LINE)
- 2 THERMOPLASTIC PAVEMENT MARKING LINE 4" (YELLOW 10' DASH, 30' SKIP)
- 3 THERMOPLASTIC PAVEMENT MARKING LINE 4" (DOUBLE YELLOW SOLID LINE)
- 4 THERMOPLASTIC PAVEMENT MARKING LINE 4" (WHITE LANE LINE 10' DASH, 30' SKIP W/ 2 CRYSTAL / OPAQUE RPM'S)
- 5 THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE LANE LINE 2' DASH, 6' SKIP)

- 6 THERMOPLASTIC PAVEMENT MARKING LINE 6" (WHITE SOLID LINE)
- 7 THERMOPLASTIC PAVEMENT MARKING LINE 8" (WHITE SOLID LINE)
- 8 THERMOPLASTIC PAVEMENT MARKING LINE 12" (YELLOW DIAGONAL LINE)
- 9 THERMOPLASTIC PAVEMENT MARKING LINE 24" (WHITE STOP BAR)
- 10 THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS (TYP.)
- THERMOPLASTIC PAVEMENT MARKING LINE 12" WHITE DIAGONAL LINE, 5' C-C @ 45°
- 12 THERMOPLASTIC PAVEMENT MARKING LINE 5" WHITE LANE LINES, 10' DASH, 30'
- 13 THERMOPLASTIC PAVEMENT MARKING LINE 4" WHITE EDGE LINE
- 14 THERMOPLASTIC PAVEMENT MARKING LINE 12" WHITE DIAGONAL LINE, 30' C-C @ 45°
- 15 THERMOPLASTIC PAVEMENT MARKING LINE 12" (WHITE SOLID LINE)
- 16 THERMOPLASTIC PAVEMENT MARKING LINE 12" WHITE DIAGONAL LINE, 15' C-C @ 45°

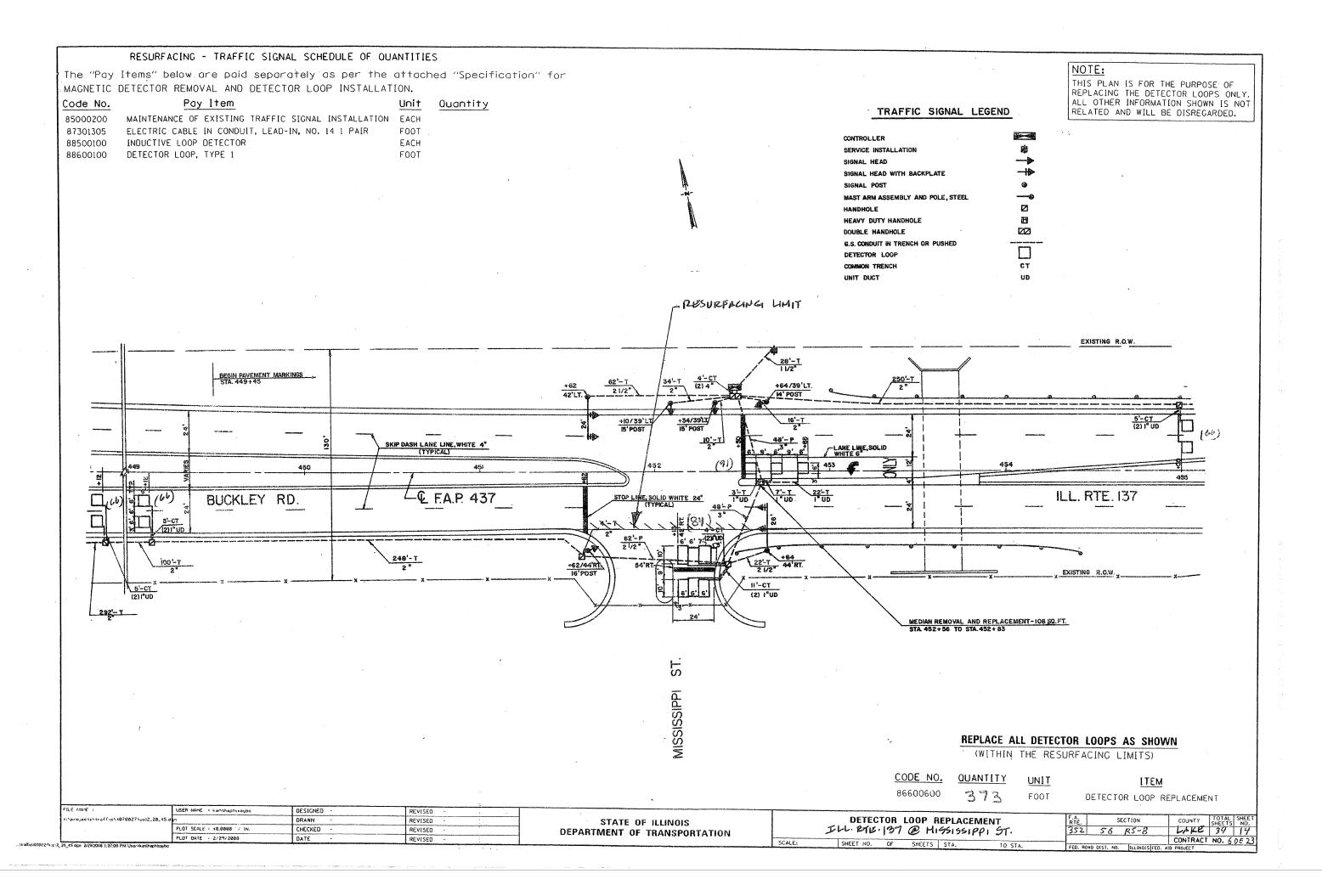
FILE NAME = D160E23-sht-pmk7.dgn PLOT DATE = 1/13/2009

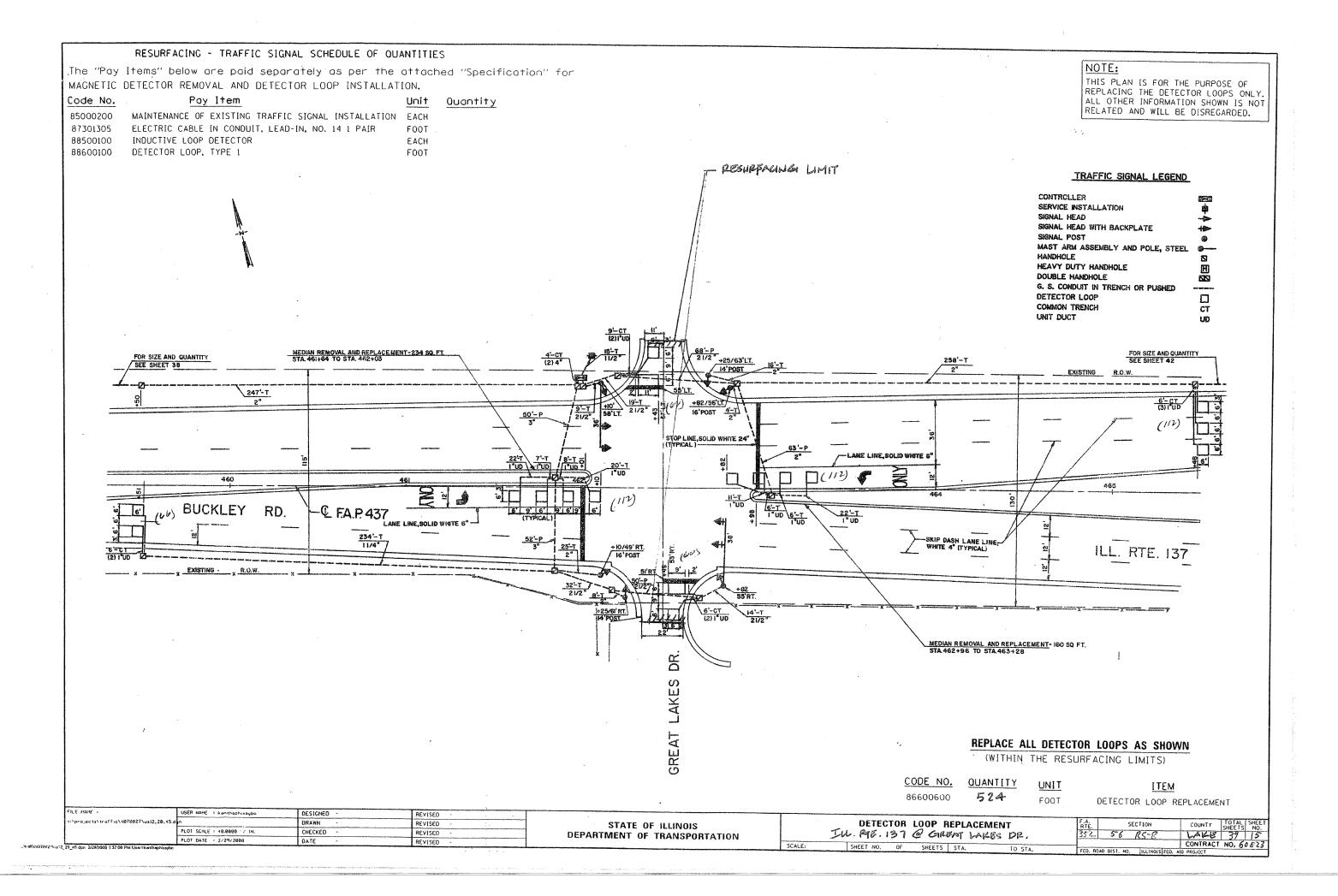
CHRISTIAN-ROGE & ASSOCIATES, INC. ENGINEERS - PLANNERS - SURVEYORS 211 WEST WACKER DRIVE CHICAGO, ILLINOIS 60606 CHECKED - S.J.P. REVISED REVISED PHONE: (312)372-2023 FAX: (312)372-5274 DATE JANUARY 13, 2009 REVISED

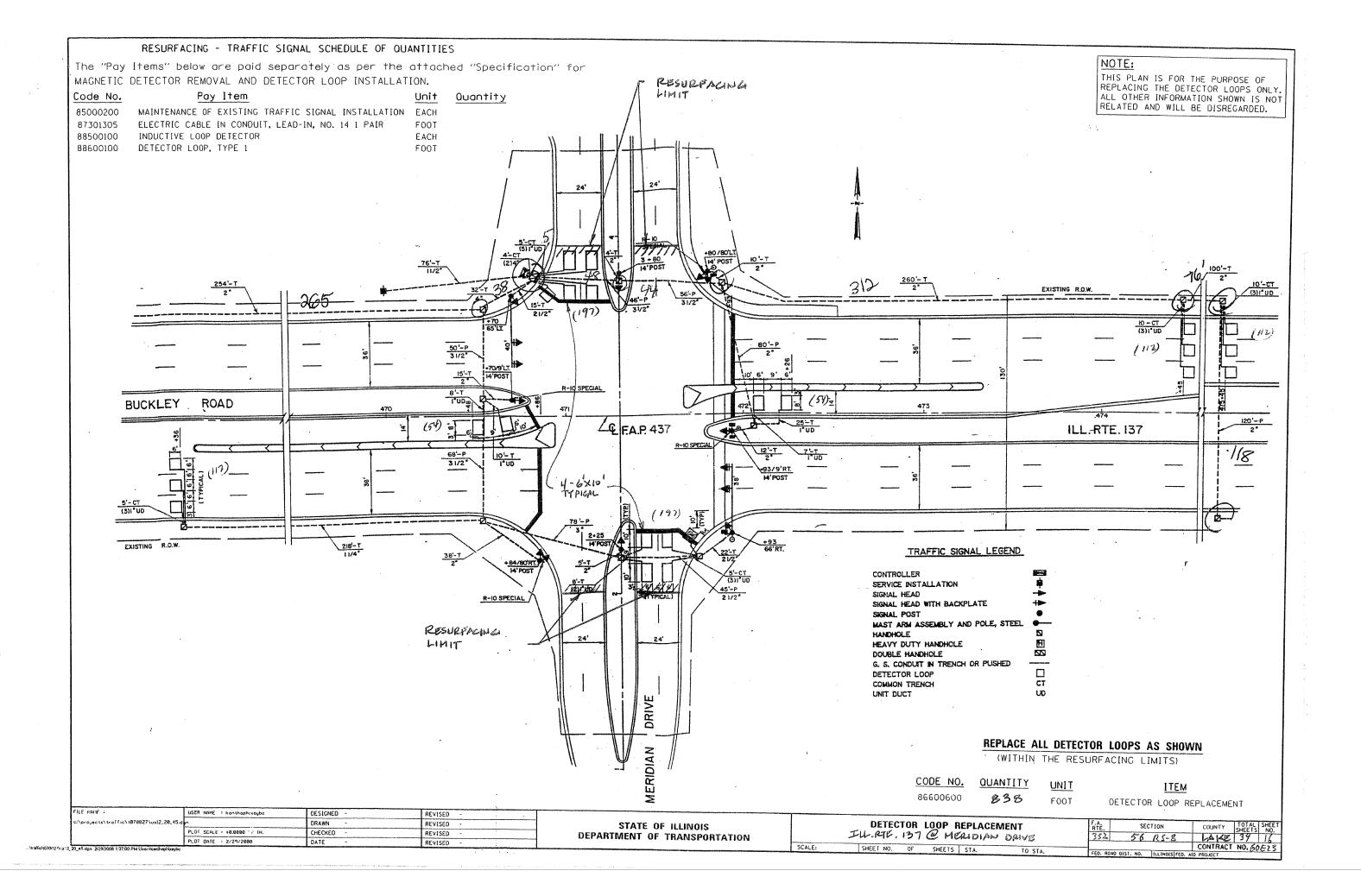
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

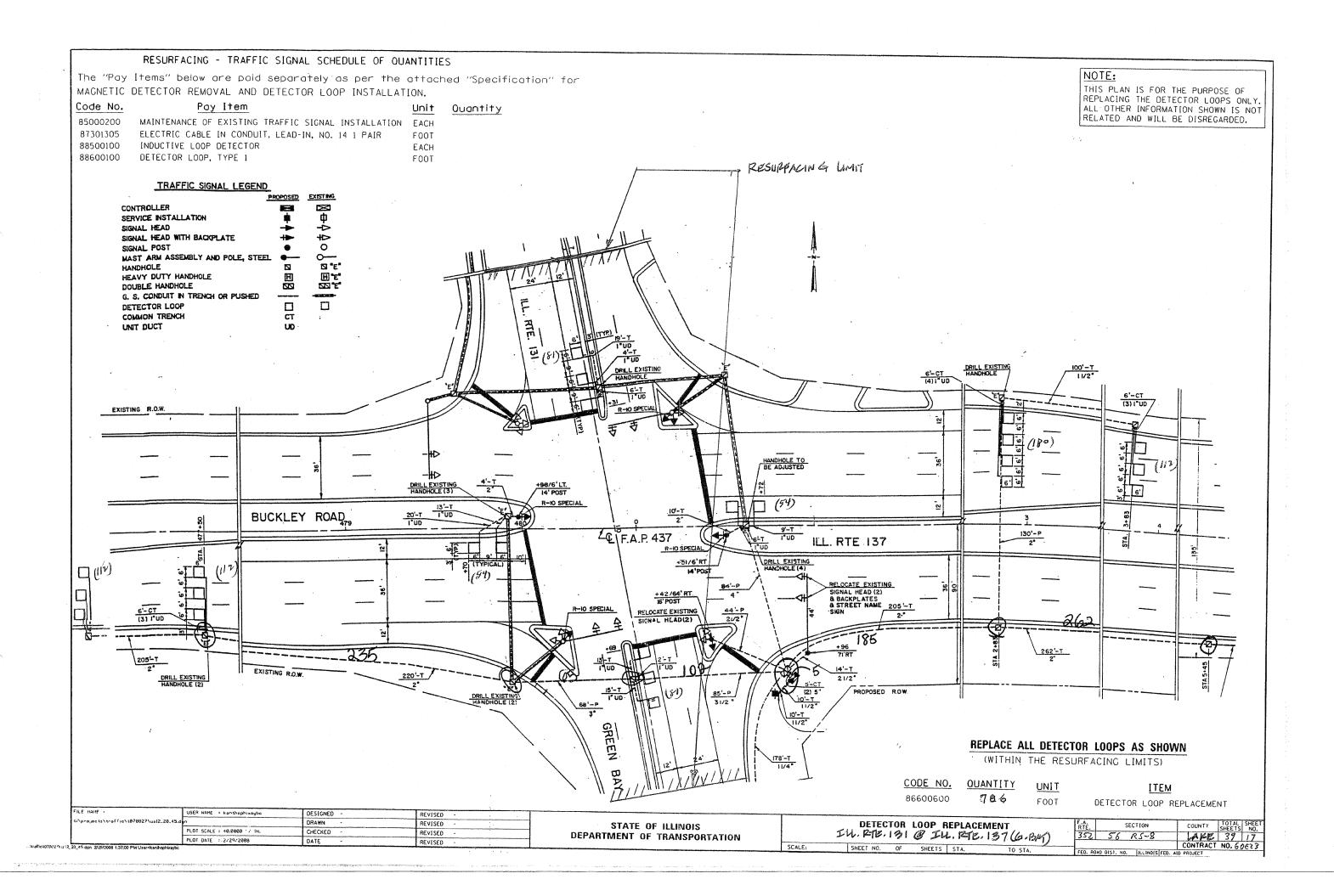
ROADWAY AND PAVEMENT MARKING PLAN IL 137 (AMSTUTZ EXPRESSWAY) SCALE: 1" = 50' SHEET NO. 8 OF 8 SHEETS STA. 35+00 TO STA, 39+26

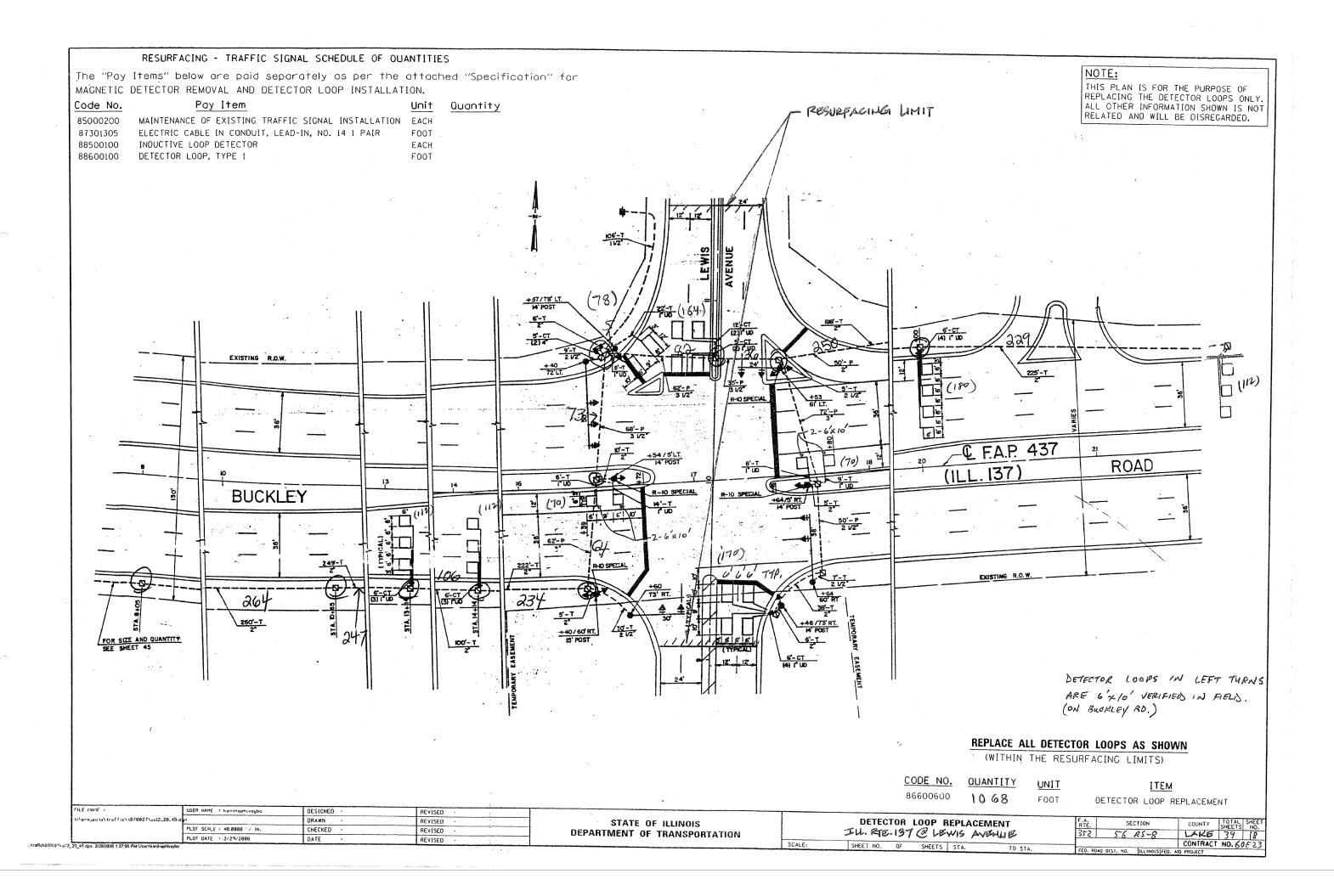
COUNTY CONTRACT NO. 60E23

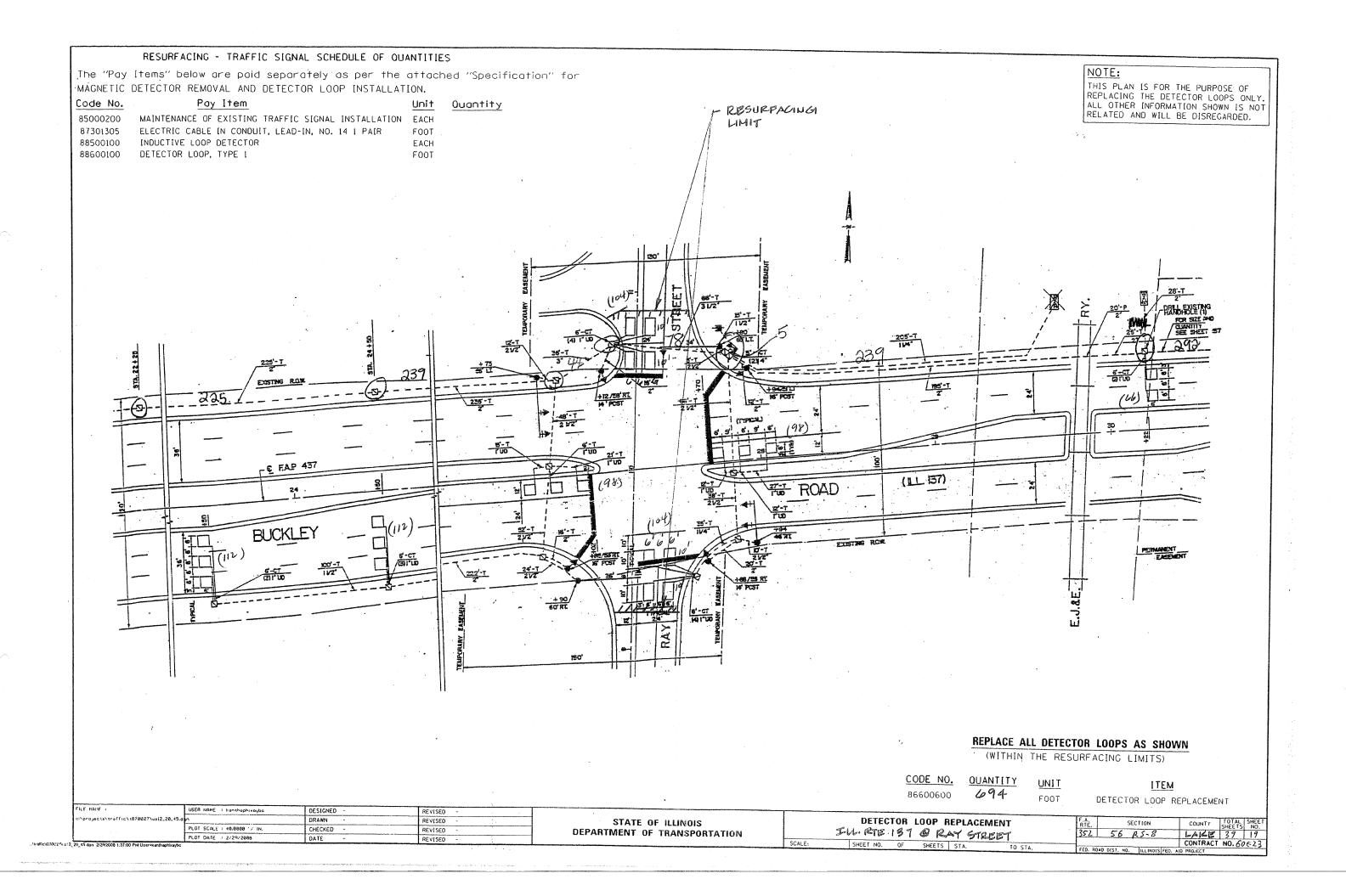


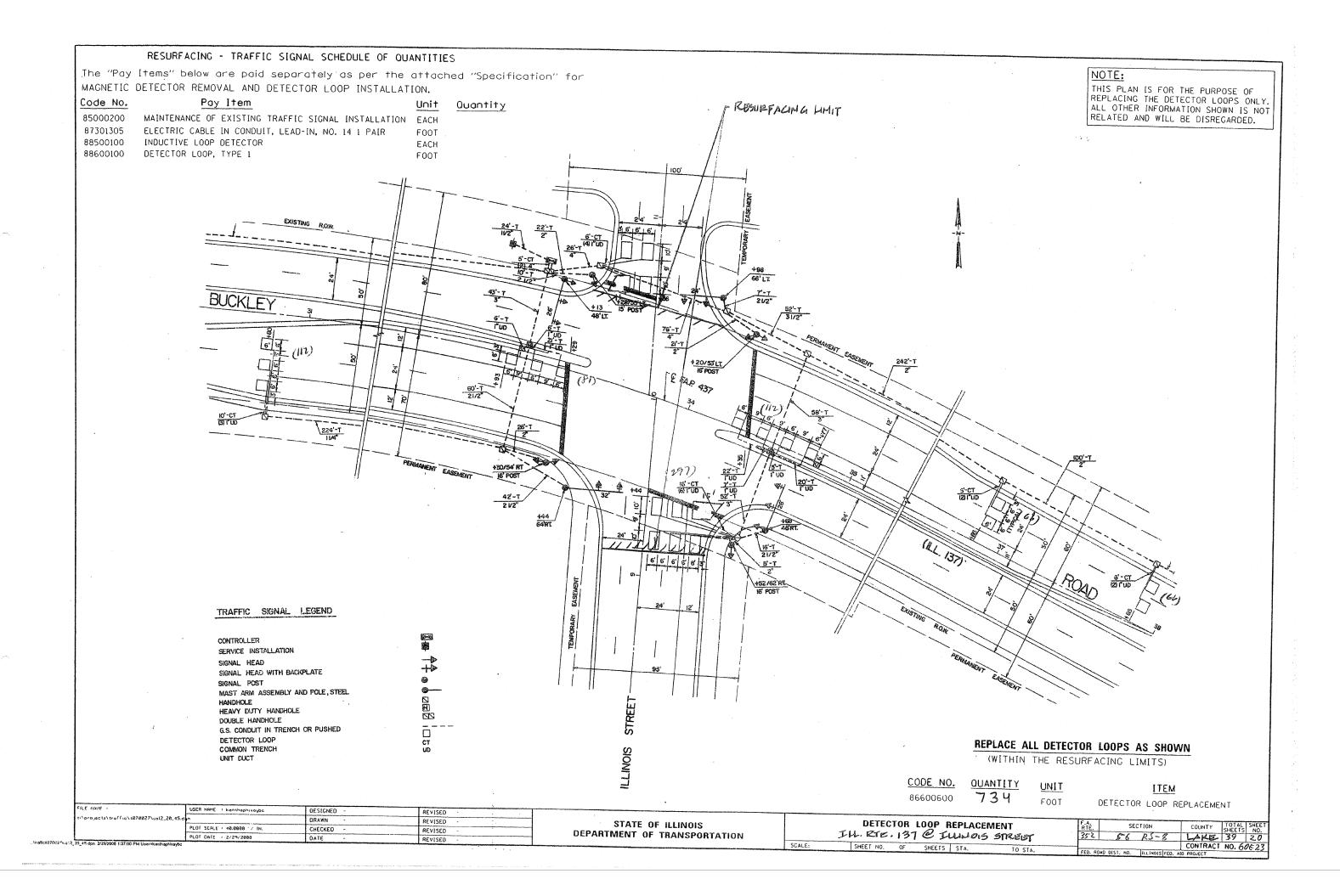


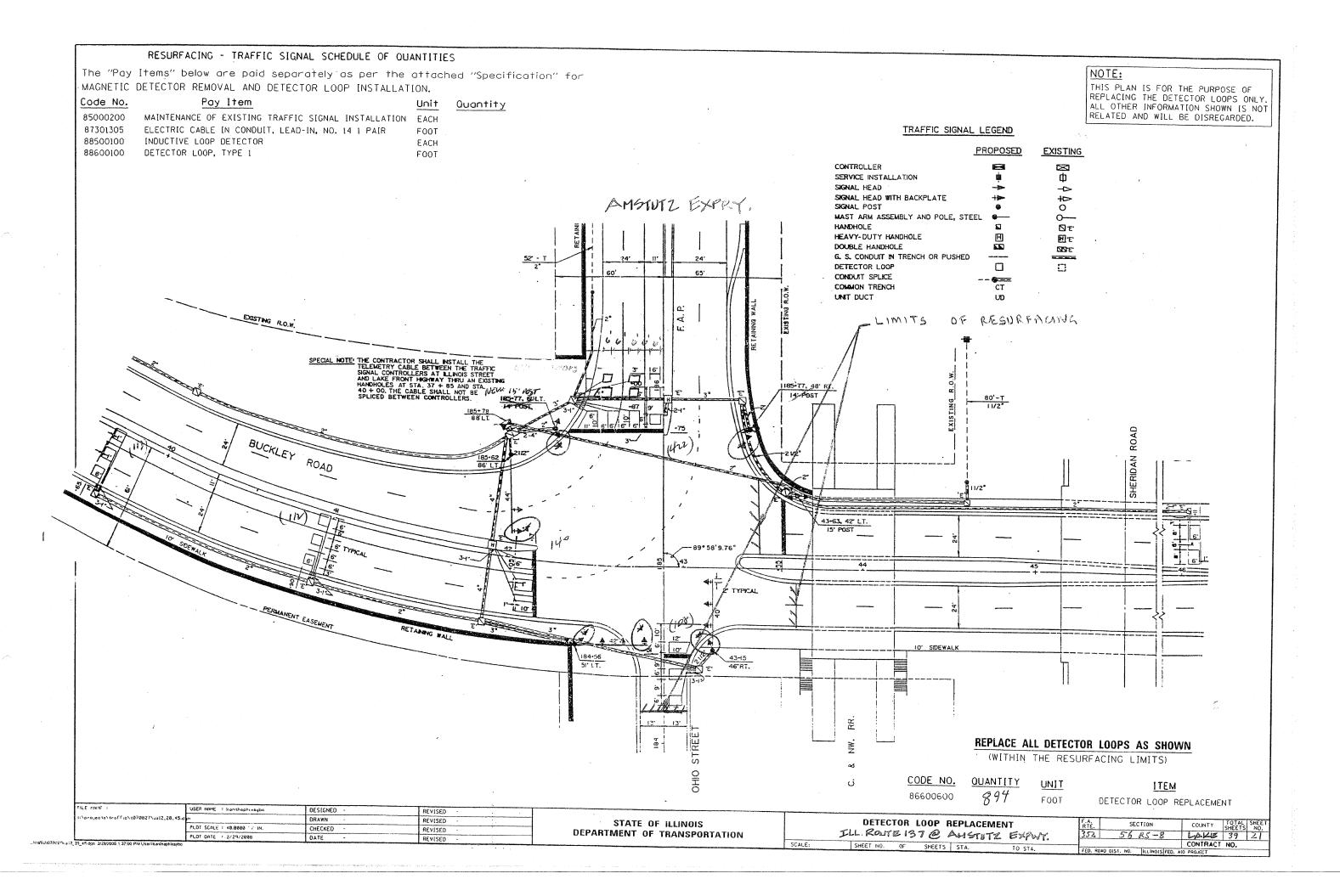


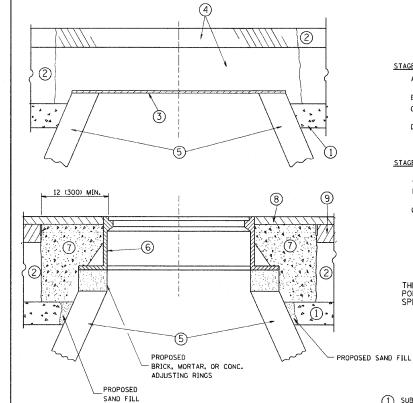












EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION, THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURRACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS.

LEGEN

- 1 SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE
- 3 36 (900) DIAMETER METAL PLATE
- 8 PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX

 (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURE

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

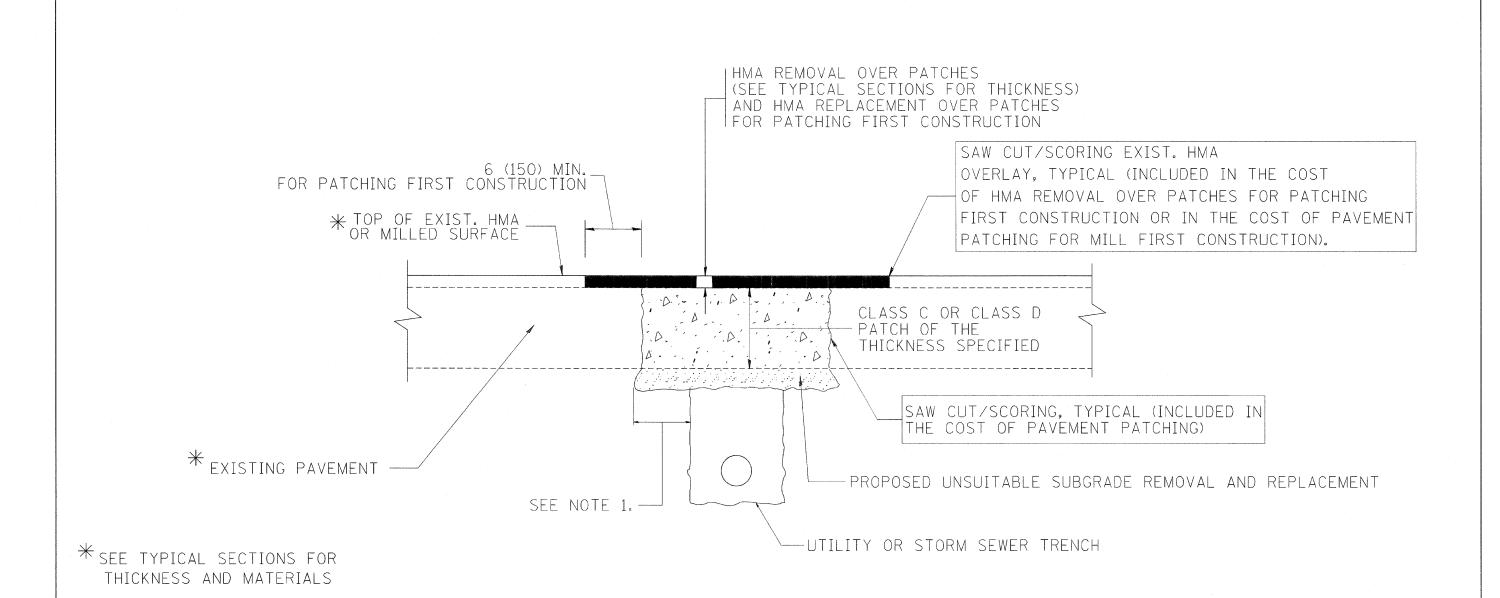
BASIS OF PAYMENT: THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "FRAMES AND LIDS TO BE ADJUSTED, SPECIAL"

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT
WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

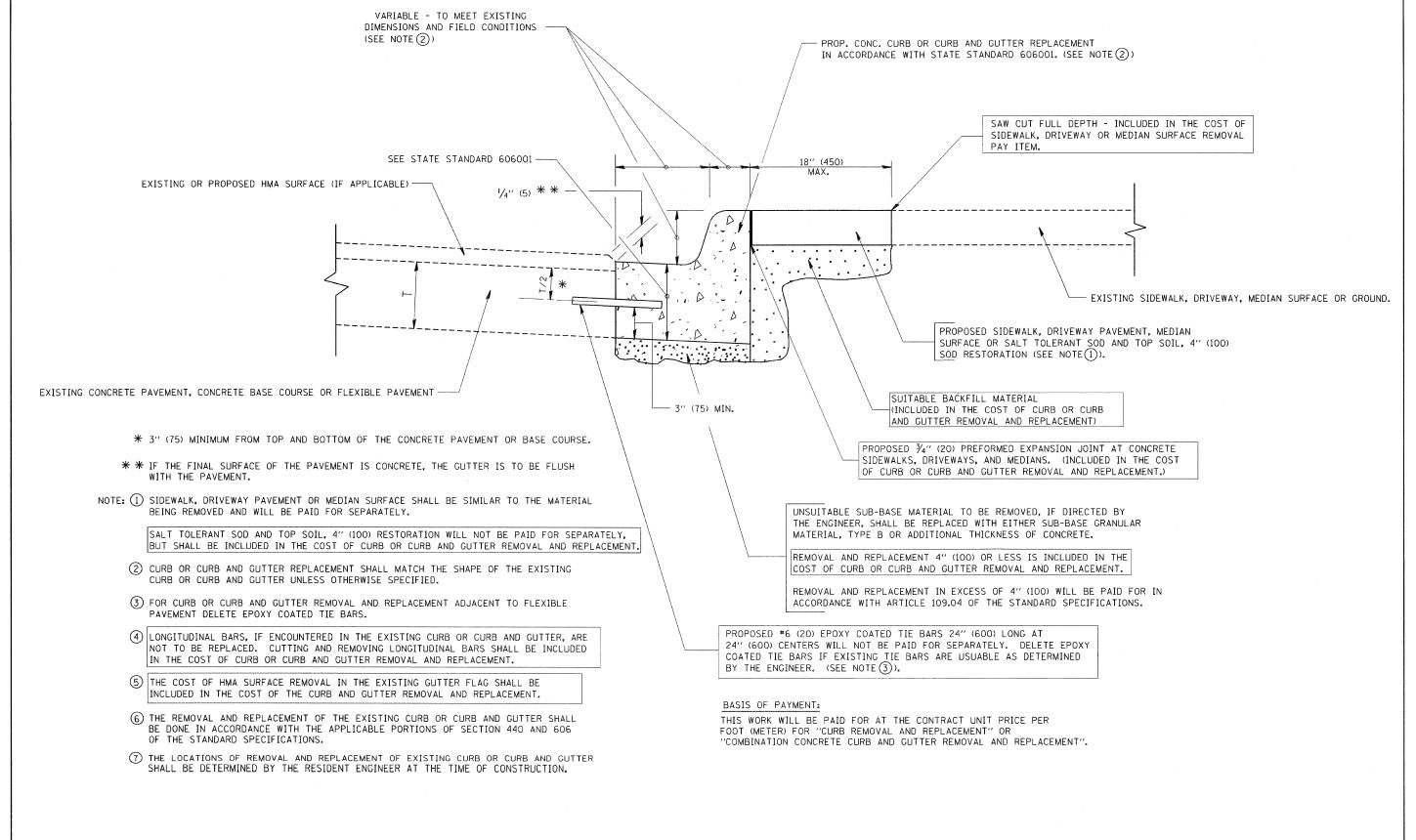
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

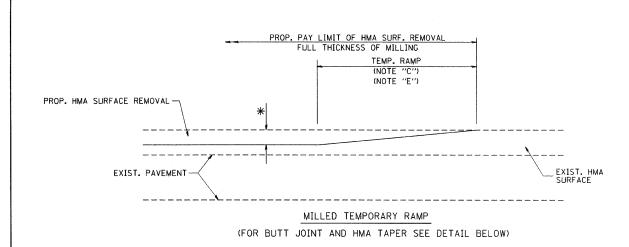
FILE NAME =	USER NAME = bauerd1	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		DANFSAFAIT DATOURA FOR	F.A SECTION	COUNTY TOTAL SHEET
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	PAVEMENT PATCHING FOR	352 56 RS-6	SHEE 15 NU.
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60E23
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	<u> </u>	AID PROJECT



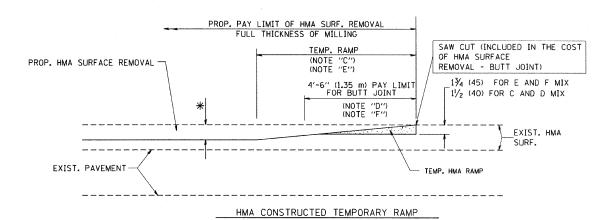
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	F.A.P. SECTION	COUNTY TOTAL SHEET
Wi\diststd\22x34\bd24.dgn		DRAWN ~	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		352 56 RS-8	LAKE 39 24F
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO 60E23
	PLOT DATE = 1/4/2008	DATE - 03-11-94	REVISED - R. BORO 01-01-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		AID PROJECT

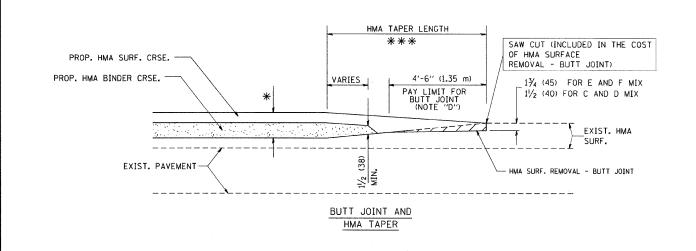


OPTION 1



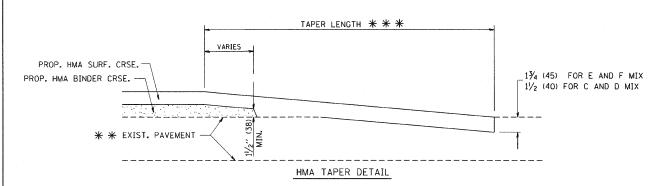
OPTION 2 TYPICAL TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

PROP. HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30'-0" (9.0 m) (NOTE "A") SAW CUT (INCLUDED IN THE COST EXIST. HMA OR PCC SURFACE OF HMA OR P.C.C. SURFACE REMOVAL 15'-0" (4.5 m) (NOTE "B") - BUTT JOINT) (NOTE "D") 13/4 (45) FOR E AND F MIX 11/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- ** * * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

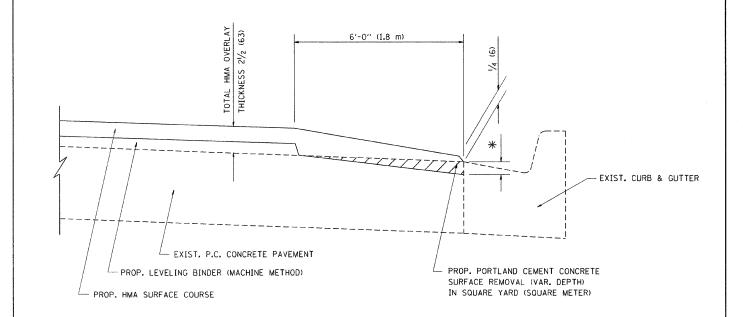
- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SOUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
Ws\dsststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	BUTT JOINT AND HMA TAPER DETAILS							SECTION	COUNTY	SHEETS	NO.
- 1								56 RS-8	LAKE	39	25
- 1	NIWA TAPER DETAILS							BD400-05 BD32	CONTRAC	Γ NO. 60E	23
	SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



HMA TAPER AT EDGE OF P.C.C PAVEMENT

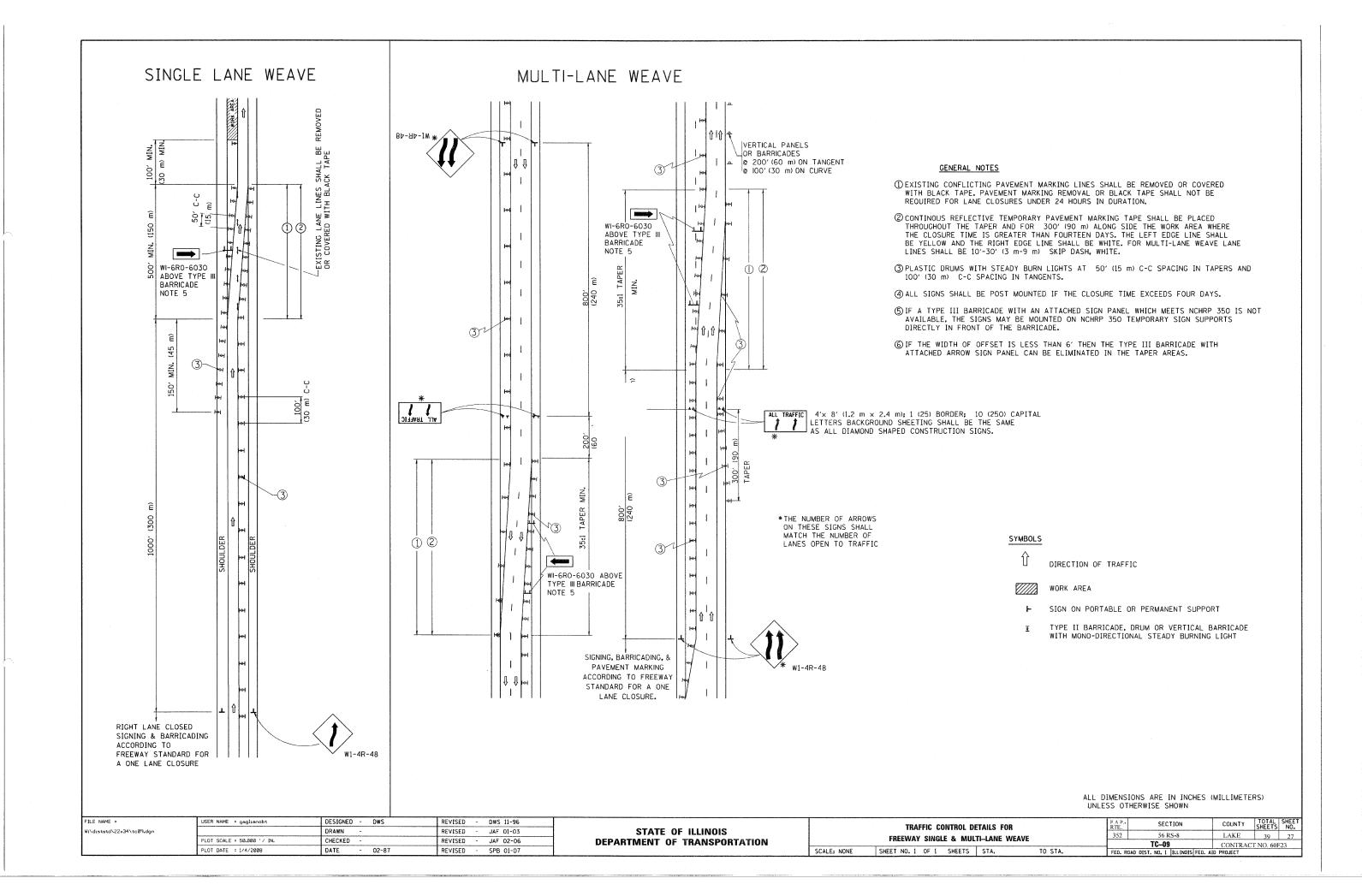
HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	★ MILLING AT GUTTER FLAG
C OR D	11/2 (38)	1 (25)	11/4 (33)
F	13/4 (44)	3/4 (19)	11/2 (38)

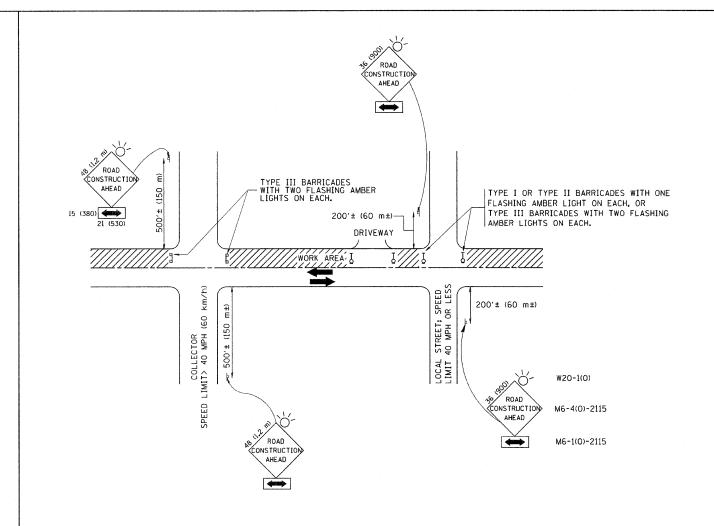
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED	-	R. SHAH	REVISED	-	R. SHAH 10-25-94
W:\diststd\22x34\bd33.dgn		DRAWN	~	JIS	REVISED	-	A. ABBAS 05-05-99
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	A. ABBAS	REVISED	-	E. GOMEZ 12-21-00
	PLOT DATE = 1/4/2008	DATE	-	09-10-94	REVISED	-	R. BORO 01-01-07

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

1		HMA TAPER AT EDGE OF P.C.C. PAVEMENT						COUNTY	TOTAL SHEETS	SHEET NO.
-								LAKE	39	26
-	EDGE OF P.C.C. PAVENIENI						D400-06 (BD33)	CONTRAC	ΓNO. 60E	23
1	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.						DAD DIST. NO. 1 ILLINOIS FED. AT	D PROJECT		





TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROLLIFE
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROLLIF.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION,
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

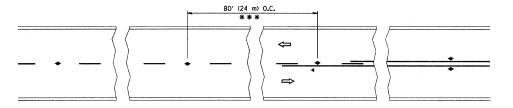
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR I TEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME = USER NAME = goglionobt DESIGNED - LHA REVISED - J. OBERLE 10-18-95
Wi\distatd\22x34\to10.dgn - REVISED - A. HOUSEH 03-06-96
PLOT SCALE = 50.808 '/ IN. CHECKED - REVISED - A. HOUSEH 10-15-96
PLOT DATE = 1/4/2008 DATE - 06-89 REVISED - T. RAMMACHER 01-06-00

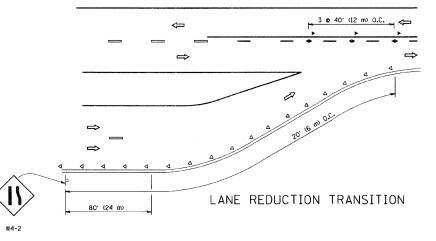
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

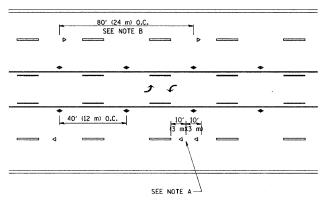
TRAFFIC CONTROL AND PROTECTION FOR	F.A.P.	SECTION	
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	352	56 RS-8	
SIDE HOADS, INTERSECTIONS, AND DRIVEWATS	TC-10		
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	DAD DIST, NO. 1 ILLINOIS FED.	



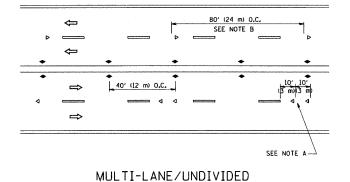
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

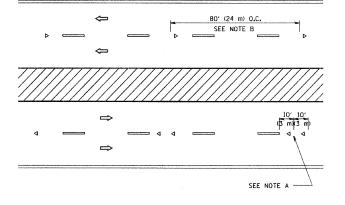
TWO-LANE/TWO-WAY





TWO-WAY LEFT TURN





MULTI-LANE/DIVIDED

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.
- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

SYMBOLS

- YELLOW STRIPE
- ---- WHITE STRIPE
- ◆ ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

DESIGN NOTES

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHOULD BE INCLUDED IN THE PLANS.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

3 @ 80' (24 m) O.C. —	(E) (3 to 40' (12 m) (3 to 40' (12 m)		MINIMUM OF 3 W EOUALLY SPACED	1	ිසි ව රා _ 3 @ 40' (12	1	' (24 m) O _• C
1 1 1 1	 	40' (12 m) 0.C.	* * WHERE	WO-LANE/TWO-WAY WHERE MARKER THE MEDIAN WIDTH IS 6' (2 m) (WO-WAY MARKERS.	O.C.		

LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

COUNTY TOTAL SHEET NO. FILE NAME = USER NAME = gaglianobt DESIGNED REVISED - T. RAMMACHER 09-19-94 SECTION TYPICAL APPLICATIONS DRAWN REVISED - T. RAMMACHER 03-12-99 STATE OF ILLINOIS LAKE 39 29 56 RS-8 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) PLOT SCALE = 50.000 ' / IN. REVISED -T. RAMMACHER 01-06-00 CHECKED **DEPARTMENT OF TRANSPORTATION** | TC-11 | CONTRACT NO. 60E23 | FED. ROAD DIST. NO. 1 | ILLINDIS | FED. AID | PROJECT | DATE PLOT DATE = 1/4/2008 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. REVISED

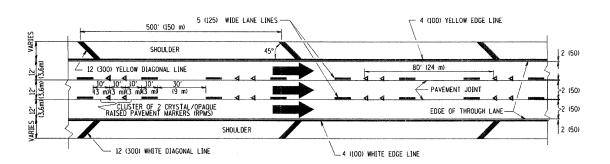
THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH

THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH

SHOULDER

4 (100) WHITE EDGE LINE 4 (100) YELLOW EDGE LINE

> 2 (50) -4 (100) WHITE EDGE LINE -



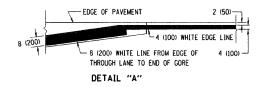
TYPICAL EDGE LINES & LANE LINES

- NOTES:

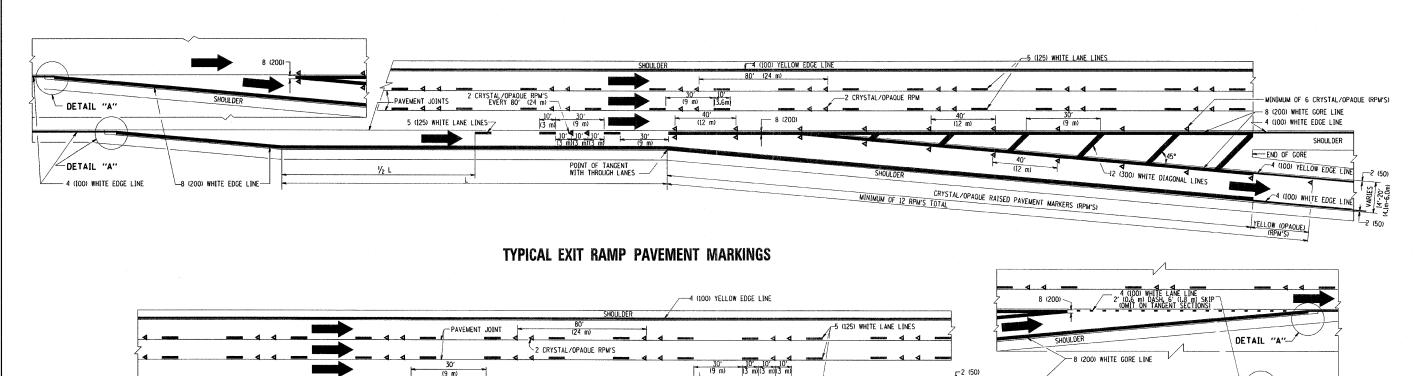
 1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
- 2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT

1/2 L

3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC



-DETAIL "A"



2 CRYSTAL/OPAQUE RPM'S EVERY 80' (24 m)

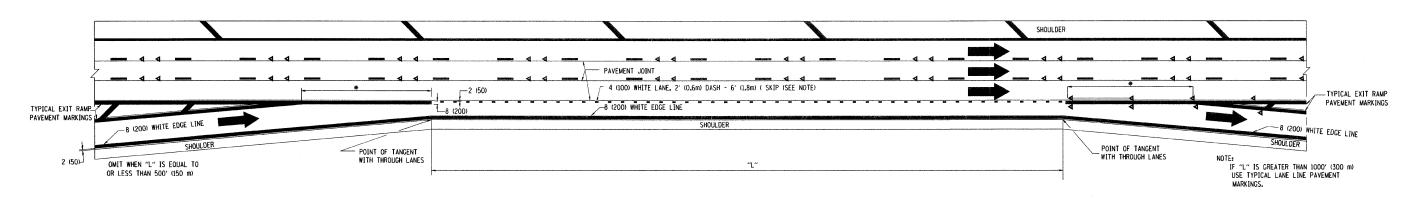
POINT OF TANGENT
WITH THROUGH LANES

TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

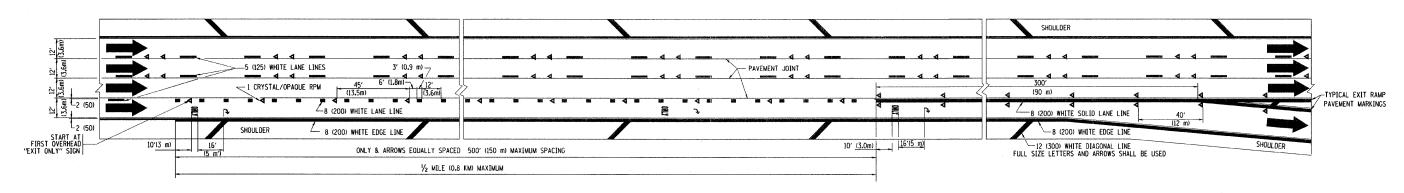
- 8 (200) WHITE GORE LINE \(\simeq 12 (300) WHITE DIAGONAL LINES

SHOULDER

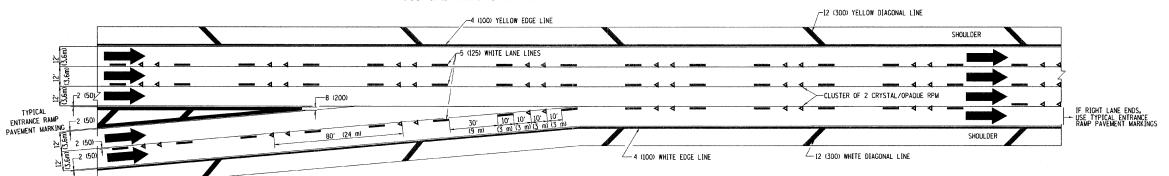
FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96			MULTI-LANE FREEWAY	FAP.	SECTION	COUNTY TOTAL SHEET
W:\diststd\22x34\to12.dgn		DRAWN ~	REVISED ~ D.W.S. 07-96	STATE OF ILLINOIS	PAVEMENT MARKING DETAILS		352	56 RS-8	LAKE 30 30
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION			332	TC-12	CONTRACT NO 60F23
	PLOT DATE = 1/4/2008	DATE - 01-90	REVISED - S.P.B. 01-07		SCALE: NONE	SHEET NO. 1 OF 2 SHEETS STA. TO STA.	FED. ROAD D	IST. NO. 1 ILLINOIS FED. A	CONTINUED INC. OOLES



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS

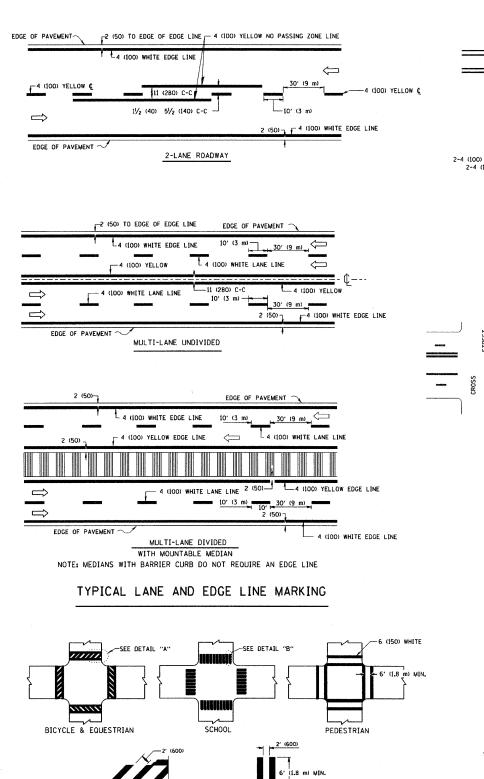


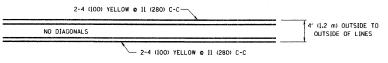
TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



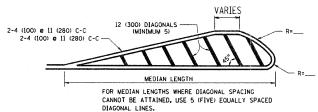
TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

FILE NAME =	USER NAME = gaglianobt	DESIGNED - D.W.S.	REVISED - A.H. 03-96		MULTI-LANE FREEWAY	FAP. SECTION COUNTY TOTAL SHEET
Wt\distatd\22x34\tc12.dgn		DRAWN -	REVISED - D.W.S. 07-96	STATE OF ILLINOIS		352 56 RS-8 LAKE 39 31
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - J.A.F. 02-06	DEPARTMENT OF TRANSPORTATION	PAVEMENT MARKING DETAILS	TC-12 CONTRACT NO. 60E23
	PLOT DATE = 1/4/2008	DATE - 01-90	DATE - 01-90 REVISED - S.P.B. 01-07 SC	SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	





4' (1.2 m) WIDE MEDIANS ONLY

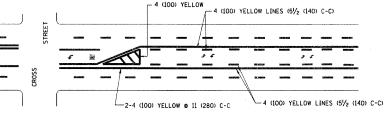


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))

75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

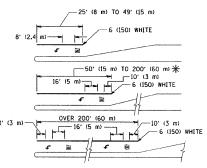


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

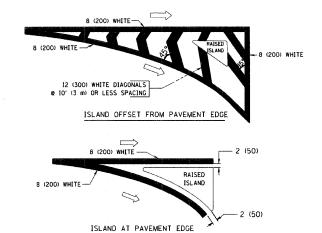


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SQ. FT. (1.5 m²) \P AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE W1TH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVEDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	AEFFOM AEFFOM	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 1280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2,4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH: 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOL ID SOL ID SOL ID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 © 4 (100) WITH 12 (300) DIAGONALS © 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS & 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" IS 6' (1.8 m: LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m ²) EACH "X"=54.0 SO. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) © 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
W:\diststd\22x34\tc13.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

6 (150) WHITE

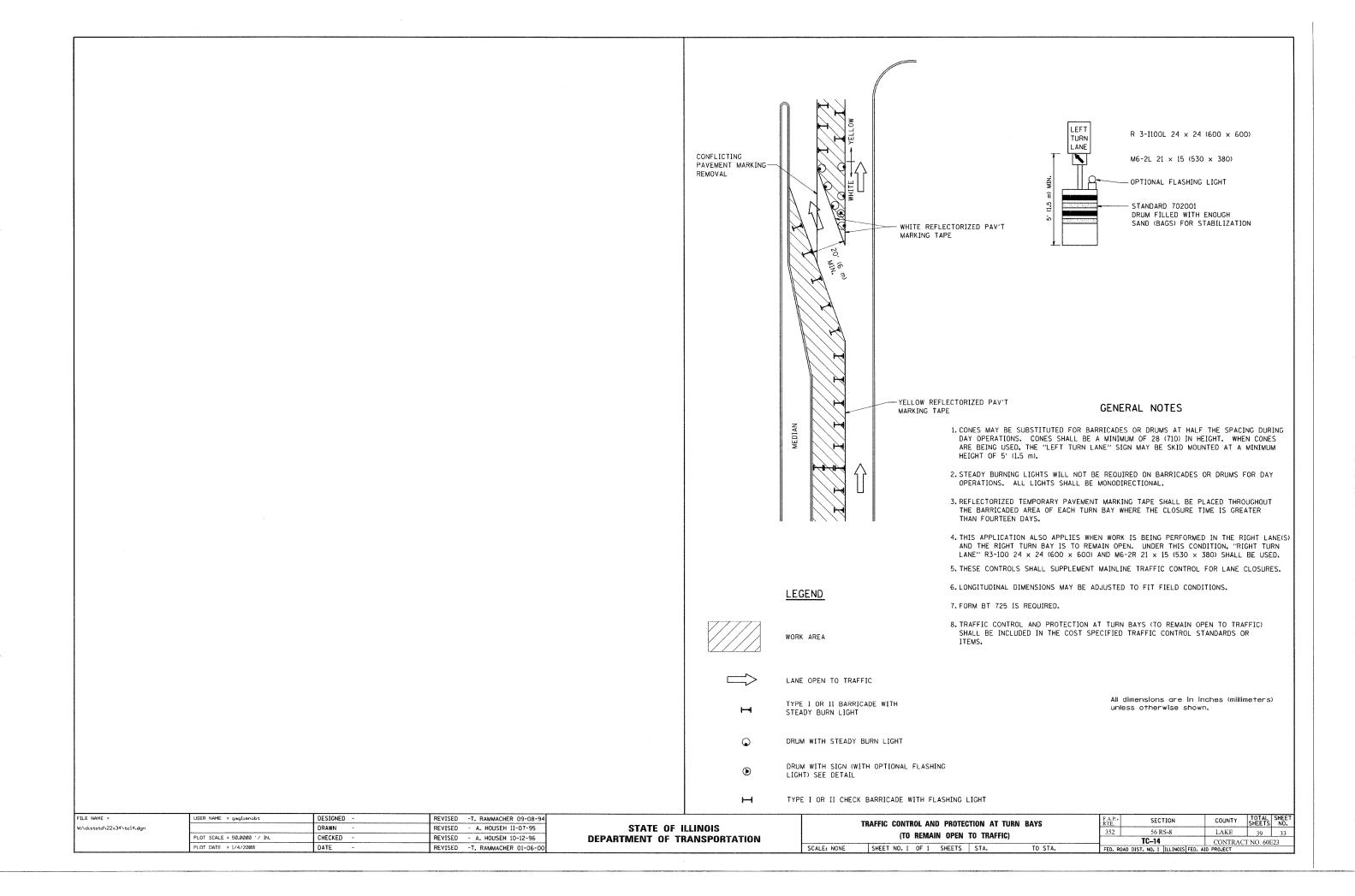
TYPICAL CROSSWALK MARKING

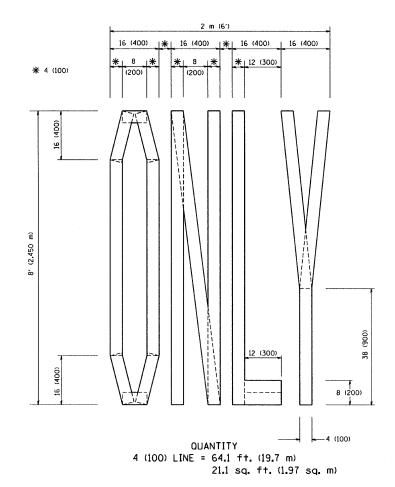
DETAIL "A"

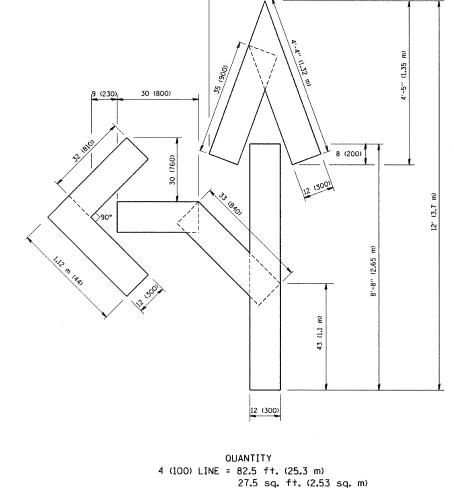
12 (300) WHITE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

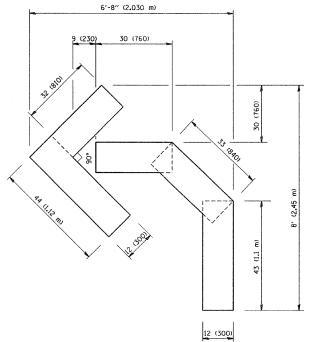
	DIS	F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
TYPICAL PAVEMENT MARKINGS						56 RS-8	LAKE	39	32
	IIIIUAL IA	TC-13 C		CONTRAC	CONTRACT NO. 60E23				
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT				







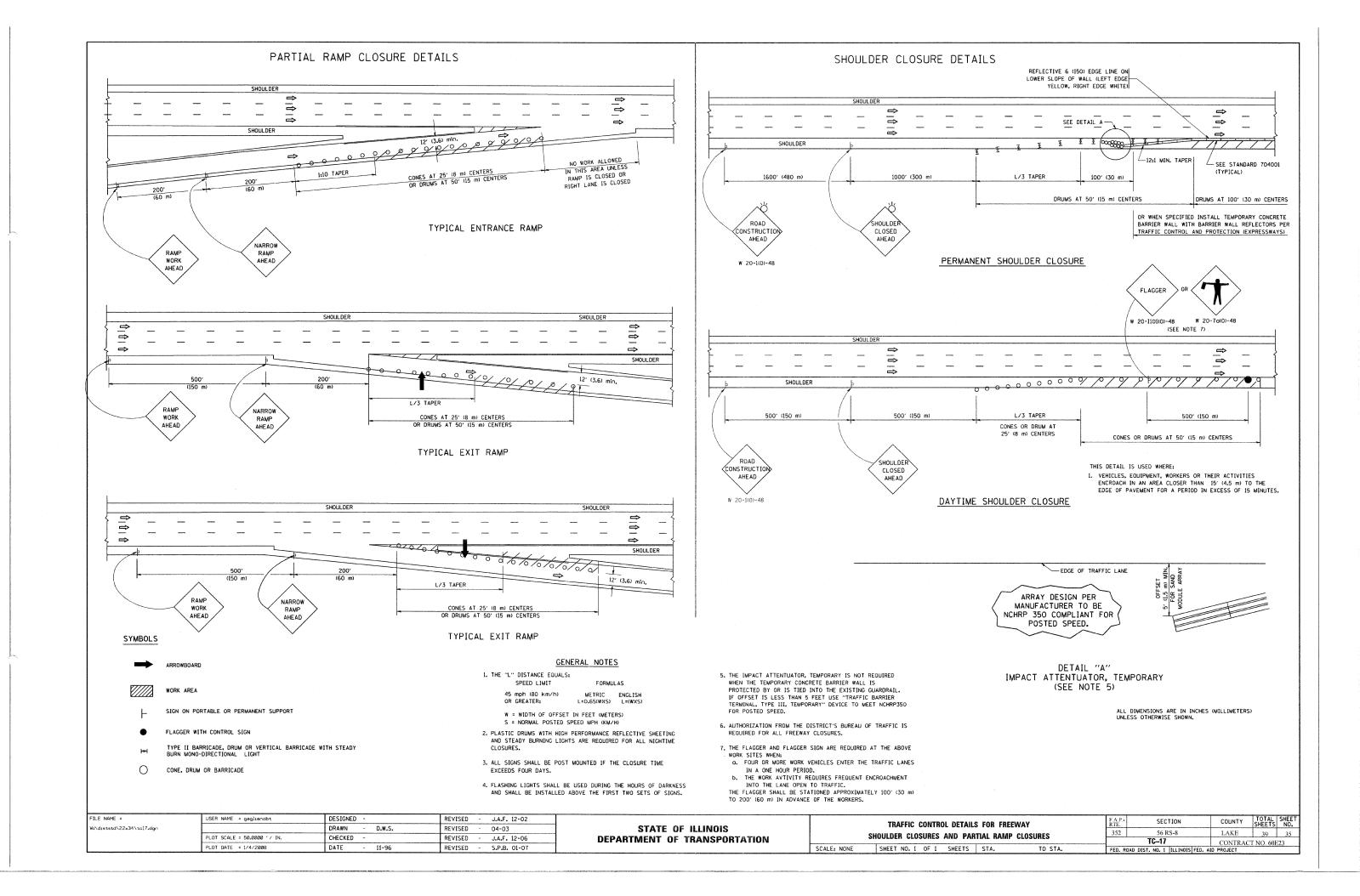
1'-8" (500)

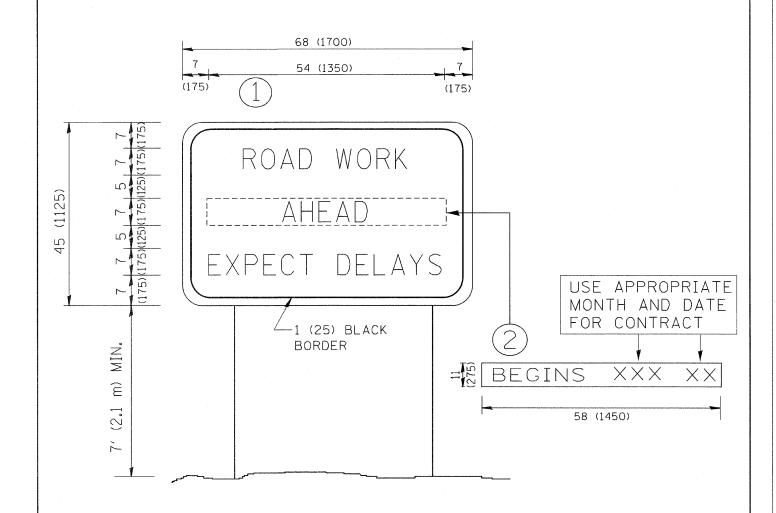


OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

	FILE NAME =	USER NAME = gaglianobt	DESIGNED ~	REVISED -T. RAMMACHER 06-05-96		DAVIDATELY STADISTIC LETTERS AND SYMPOLS	F.A.P. SECTION	COUNTY TOTAL SHEET SHEET NO.
l	W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS	PAVEMENT MARKING LETTERS AND SYMBOLS	352 56 RS-8	LAKE 30 34
		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIC STAGING	TC-16	CONTRACT NO 60E22
L		PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT





NOTES:

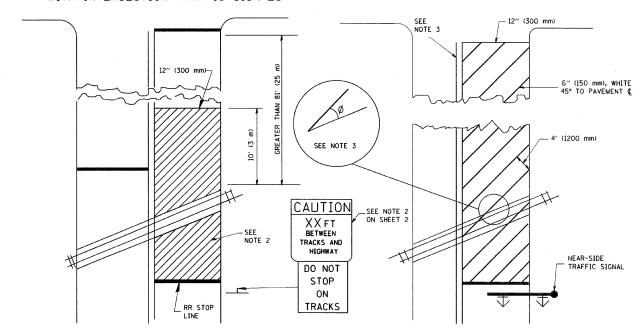
- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN 1) WITH INSTALLED PANEL 2 ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL 2 SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED ~	REVISED - R. MIRS 09-15-97			ARTERIAL RO		F.A.P.	SECTION	COUNTY	TOTAL SHEET
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				352	56 RS-8	LAKE	30 36
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN		1 332	TC-22	CONTRAC	T NO 60E33	
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07	SCA	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. RO		D. AID PROJECT	21 NO. 00E23

WITH INTERSECTION TRAFFIC SIGNALS

WITH NEAR-SIDE TRAFFIC SIGNALS

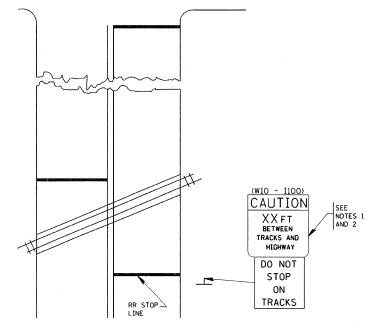


NOTES

- PAYEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS
 WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- 2. WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED, THE PAVEMENT MARKINGS EXTENDS TO THE INTERSECTION.
- 3. WHERE THE ANGLE BETWEEN THE DIAGONAL STRIPES AND THE TRACK (Ø) WOULD BE LESS THAN APPROXIMATELY 20°. THE STRIPES SHOULD BE SLOPED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

WITH NONSIGNALIZED INTERSECTION

81' (25 m) OR LESS TO CLOSEST RAIL



NOTE :

- 1. DISTANCE TO BE SHOWN ON SIGN MEASURED FROM A POINT 6 FEET (1.8 m) FROM THE RAIL CLOSEST TO THE INTERSECTION TO THE STOP LINE OR CROSSWALK, WHICHEVER IS CLOSEST, ROUNDED DOWN TO THE NEAREST 5 FEET (1.5 m). WHERE THERE IS NO STOP LINE, MEASURE TO POINT WHERE THE DRIVER HAS A VIEW OF APPROACHING TRAFFIC.
- 2. THE CLEARANCE SIGN IS ALSO TO BE USED AS AN INTERIM MEASURE AT LOCATIONS WITH INTERCONNECTED INTERSECTION TRAFFIC SIGNALS WHERE IT IS PLANNED TO CHANGE THEM TO NEAR-SIDE SIGNALS AT A FUTURE TIME. IN THIS CASE, THE DISTANCE TO BE SHOWN ON THE SIGN IS MEASURED FROM THE EDGO OF THE STRIPED-OUT AREA INSTEAD OF 6-FEET FROM THE RAIL. THE SIGN IS TO BE REMOVED WHEN THE NEAR-SIDE SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS EXTEND TO THE INTERSECTION.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - 01-01-07
W:\diststd\22x34\tc23idgn		DRAWN -	REVISED -
1	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

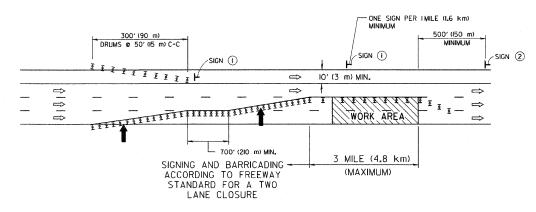
STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

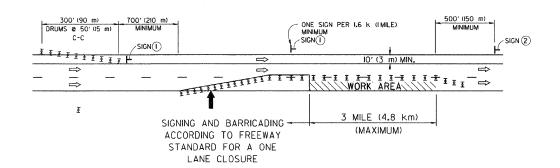
TYPICAL SUPPLEMENTAL SIGNING AND PAVEMENT MARKING	F.A.P.	SECTION	COUNTY	TOTAL	SHEET NO.
TREATMENT FOR RAILROAD CROSSINGS	352	352 56 RS-8		39	37
		TC-23	CONTRAC	Γ NO. 60E	23
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. AT	D PROJECT		

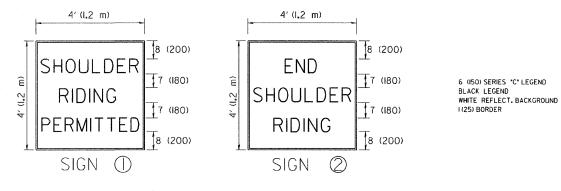
CENTER LANE CLOSURE TYPE I CHECK BARRICADES-AT 100' (30 m) CENTERS DRUMS AT 50' (15 m) CENTERS MIN. W20-I101 (0)-48 FLAGGER ORANGE FLAGS 18×18 (450×450) W20-7a(0)-48 W12-1-48 LANE CLOSED [′]*w20-5-48 SIGNING & BARRICADING ACCORDING TO FREEWAY STANDARD FOR A ONE LANE CLOSURE I. DAY OPERATIONS: CONES SHALL BE USED AT 25'(8 m) CENTERS ON TAPERS AND AT 50'(15 m) CENTERS ON TANGENTS. 2. NIGHT OPERATIONS: DRUMS WITH STEADY BURN LIGHTS SHALL BE USED AT 50' (15 m) CENTERS ON ALL TAPERS AND TANGENTS IN ADVANCE OF WORK AREA. 3.CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS INSTALLATION SEQUENCE 1. CLOSE LANES 1&2 WORKING AREA 2. ERECT INSIDE LANE 2 TAPER 3. OPEN LANE 2 BY RELOCATING FIRST TAPER D 4. REMOVE CLOSURE IN REVERSE ORDER FILE NAME =

SHOULDER LANE

NOTE: CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.







SYMBOLS

- DIRECTION OF TRAFFIC
- ■■■ ARROWBOARD
- WORK AREA
- SIGN WITH 18×18 (450×450) ORANGE FLAGS ATTACHED *
- ► SIGN ON PORTABLE OR PERMANENT SUPPORT *
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURN LIGHT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN

* ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).

	USER NAME = gaglianobt	DESIGNED -	REVISED - J.A.F. 04-03			TRAFFIC CONTROL DETAIL	C EOD EDEEWAY		F.A.P.	SECTION	COUNTY	TOTAL SHEET	
n		DRAWN ~	REVISED - S.P.B. 01-07	STATE OF ILLINOIS					352	56 RS-8	LAKE	20 29	
	PLOT SCALE = 50.000 '/ IN.	CHECKED ~	REVISED -	DEPARTMENT OF TRANSPORTATION	CENTER LANE CLOSURE SHOULDER LANE				TC-25 CC		CONTRACT	CONTRACT NO 60E23	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIS		AID PROJECT	NO. 00E25	

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUIAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER PAVED OR NON-PAVED SHOULDER 1'' (25 mm) UNIT DUCT-TRENCHED TO E/P **

* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

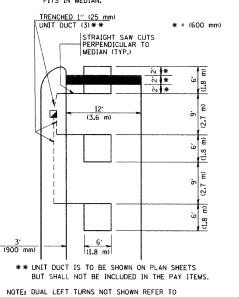
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

* = (600 mm)

LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

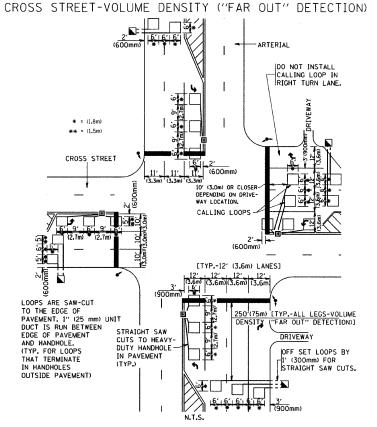
DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

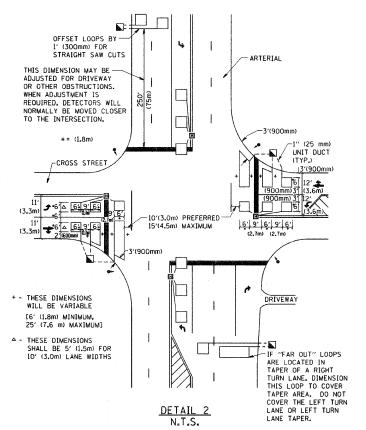
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
ROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)





NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. <u>EACH</u> ONE OF THESE TYPE OF LOOPS REQUIRES A <u>SEPARATE</u> TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A <u>SEPARATE</u> INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE 1.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

-	FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -	T
	W:\distatd\22x34\ta07.dqn	3-3	DRAWN -	REVISED -	
ı	w:\aiststa\22x34\tsb/,agn				
		PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED ~	DEP/
		PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 – DETECTOR LOOP INSTALLATION	F.A.P.	SECTION			SHEET NO.	
DETAILS FOR ROADWAY RESURFACING	352	56 RS-8	LAKE	39	39	
DETAILS FOR HOADWAY RESOURACING	TS-07 CONTRACT NO. 6				23	
SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					