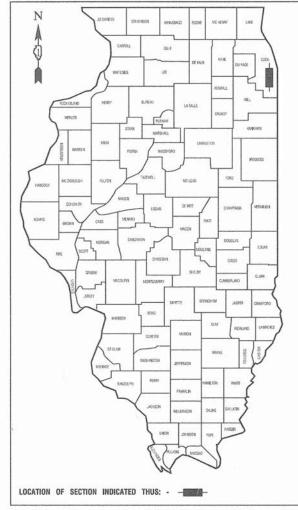
STATE OF ILLINOIS 06-13-14 LETTING ITEM 049 INDEX OF SHEETS **COVER SHEET. INDEX OF SHEETS & STATE STANDARDS** 2. **SUMMARY OF QUANTITIES & GENERAL NOTES** DEPARTMENT OF TRANSPORTATION 3. TYPICAL SECTIONS PAVEMENT PLAN DIVISION OF HIGHWAYS PAVEMENT MARKING PLAN 10.-18. IDOT DISTRICT 1 STANDARD DETAILS PLANS FOR PROPOSED **HIGHWAY STANDARDS** 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS 424001-07 PERPENDICULAR CURB RAMPS FEDERAL AID HIGHWAY 424006-01 DIAGONAL CURB RAMPS FOR SIDEWALKS 424011-01 CORNER PARALLEL CURB RAMPS FOR SIDEWALKS 424016-01 MID-BLOCK CURB RAMPS FOR SIDEWALKS **FAU 1621 (RIDGE ROAD)** 424021-02 DEPRESSED CORNER FOR SIDEWALKS 424026-01 ENTRANCE/ALLEY PEDESTRIAN CROSSINGS **FAU 2933 (STONY ISLAND AVENUE) TO FAU 2937 (TORRENCE AVENUE)** 442201-03 CLASS C AND D PATCHES 482011-03 HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING **ROADWAY RESURFACING** OR WIDENING AND RESURFACE PROJECTS 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE SECTION NO.: 13-00173-00-RS **CURB AND GUTTER** 701011-04 OFF-ROAD MOVING OPERATIONS, 2L, 2W DAY ONLY PROJECT NO.:M-4003(314) 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS 701501-06 URBAN LANE CLOSURE, 2L,2W, UNDIVIDED **VILLAGE of LANSING** 701701-09 URBAN LANE CLOSURE, MULTILANE, INTERSECTION 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE **COOK COUNTY** 701901-03 TRAFFIC CONTROL DEVICES JOB NO.: C-91-266-14 720001-01 SIGN PANEL MOUNTING DETAILS 720006-04 SIGN PANEL ERECTION DETAILS 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS 780001-04 TYPICAL PAVEMENT MARKINGS 886001-01 DETECTOR LOOP INSTALLATIONS RANGE 15 E 886006-01 TYPICAL LAYOUT FOR DETECTOR LOOPS RIDGE ROAD 2012 ADT -3,700 POSTED SPEED LIMIT -DESIGN PERIOD -20 YEARS DESIGN SPEED LIMIT -30 mph STREET CLASSIFICATION -MAJOR COLLECTOR BEGIN OMISSION RIDGE ROAD DRIVE STA 541+85 PROFILE HORIZ. - 1"=50" PROFILE VERT. - 1"=5" END OMISSION RIDGE ROAD STA 542+40 END OF IMPROVEMENTS ENGINEER: 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. BEGIN IMPROVEMENTS RIDGE ROAD DRIVE STA 500+14 AID J. U. L. I. E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 or 811 LOCATION MAP PROJECT LOCATED IN THE CONTRACT NO. 61A47 GROSS LENGTH=5268 FEET=1.0 MILES **VILLAGE OF LANSING** NET LENGTH=5213 FEET=0.99 MILES

1621 13-00173-00-RS COOK FED. ROAD DIST. NO. 1 SLINDS FED. AND PROJECT M-4003(314)

CONTRACT #61A47





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE



	SUMMARY OF QUANTIT	IES		CONSTRUCTION TYPE CODE			SUMMARY OF QUANTITIE	ES		CONSTRUCT
CODE NO.	. PAY ITEM	UNIT	TOTAL QUANTITY	0005	S.I.	CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	0005
20200100	EARTH EXCAVATION	CU YD	5	5		60252800	CATCH BASINS TO BE RECONSTRUCTED	EACH	1	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B, 4"	SQ YD	154	154		60255500	MANHOLES TO BE ADJUSTED	EACH	12	
31101900	SUBBASE GRANULAR MATERIAL, TYPE C	TON	122	122		60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	
35101600	AGGREGATE BASE COURSE, TYPE B, 4"	SQ YD	17	17		60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1	
35800100	PREPARATION OF BASE	SQ YD	198	198		60260100	INLETS TO BE ADJUSTED	EACH	9	
35800200	AGGREGATE BASE REPAIR	TON	65	65		60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	65	65		67100100	MOBILIZATION	L SUM	1	
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	10	10		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	730	730		70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	-	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	595	595		70300100	SHORT-TERM PAVEMENT MARKING	FOOT	78	
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1946	1946	1	72000100	SIGN PANEL - TYPE 1	SQ FT	329	
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	60	60	10	72900200	METAL POST - TYPE B	FOOT	410	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1537	1537	*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	158.8	15
42400800	DETECTABLE WARNINGS	SQ FT	184	184	*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1920	11
44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	17373	17373	*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	290	:
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	327	327	*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	210	
44000600	SIDEWALK REMOVAL	SQ FT	1385	1385	*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	344	;
44201725	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	9	9	*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	144	
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	16	16		X2520650	SODDING, SALT TOLERANT (SPECIAL)	SQ YD	204	:
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	38	38		X40600110	BITUMINOUS MATERIALS (PRIME COAT)	POUND	15636	15
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	135	135		Z0004514	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"	SQ YD	267	
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	533	533		Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	1301	1
60250200	CATCH BASINS TO BE ADJUSTED	EACH	18	18		Z0013798	CONSTRUCTION LAYOUT	L SUM	1	
60250400	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, OPEN LID	EACH	1	1						

* - INDICATES SPECIALTY ITEMS

GENERAL NOTES

ROBINSON ENGINEERING SHALL BE NOTIFIED TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. CALL (708) 331-6700

THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I AND TYPE 2 BARRICADE USED. ONE (1) WEIGHTED SANDBAG SHALL BE INSTALLED ON EACH BOTTOM RAIL.

THE REMOVAL OF ANY DRIVEWAYS, PAVEMENT, CURB, ETC. SHALL BE ACCOMPLISHED BY MEANS OF A SAW CUT JOINT, AT THE DIRECTION OF THE ENGINEER. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS REMOVAL ITEMS.

WHEN, IN THE CONSTRUCTION OPERATION, ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SO THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, IT SHALL BE REMOVED AT THE CLOSE OF EACH DAY BY THE CONTRACTOR AT HIS EXPENSE. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE FREE FROM ALL DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, COMMUNICATIONS, AND GAS UTILITIES. (48 HOUR NOTIFICATION REQUIRED.)

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

SCHEDULES INCLUDED IN THE PLANS HAVE BEEN PREPARED FROM FIELD NOTES. EXACT LOCATIONS FOR PATCHING SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

AREAS DISTURBED BY CONSTRUCTION SHALL BE KEPT TO A MINIMUM. ALL AREAS DISTURBED UNNECESSARILY SHALL BE RESTORED AT THE CONTRACTORS

UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTORS USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF THE UTILITY INFORMATION.

ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES NOT SPECIFICALLY CALLED OUT ON THE PLANS SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER.

ANY REFERENCE TO THE STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE NOMINAL THICKNESS OF HOT-MIX ASPHALT MIXTURE STATED IN THE SPECIFICATIONS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THINKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT SURFACE IS PLACED.

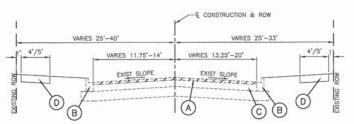
CONTRACTOR SHALL MILL EXISTING PAVEMENT PRIOR TO PATCHING.

FILE NAME = 13636-QUAN-01 - IDOT P01	USER NAME =	DESIGNED — MN	REVISED —
1		CHECKED — JP	REVISED —
	PLOT SCALE =	DRAWN — ACAD	REVISED —
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

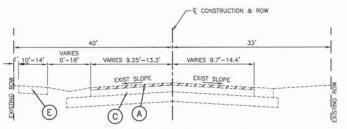
SCALE: 1*=50*

	FAU 1621 (RIDGE ROAD)		F.A.U RTE.	SEC	TION		COUNTY	TOTAL	SHE	
•		NY ISLAND AVENUE TO TORRENCE AVENUE SUMMARY OF QUANTITIES	1621	13-0017	73-00-RS		COOK	18	2	
	SUMMARY OF QUA	ANTITIES						CONTRACT	NO. 61A	47
	SHEET NO. 2 OF 18 SHEETS	STA.	TO STA.	FED. ROAD D	IST. NO. 1	ILLINOIS	FED. A	ID PROJECT M-40	03(314)	



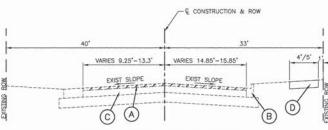
EXISTING TYPICAL SECTION

RIDGE ROAD STA. 500+14 TO STA. 506+63 STA. 519+95 TO STA. 552+81



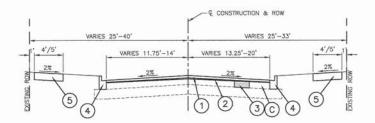
EXISTING TYPICAL SECTION

RIDGE ROAD STA. 506+63 TO STA. 513+27



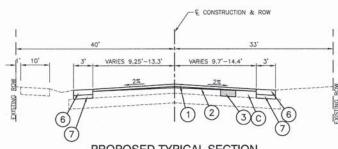
EXISTING TYPICAL SECTION

RIDGE ROAD STA. 513+27 TO STA. 519+94



PROPOSED TYPICAL SECTION

RIDGE ROAD STA. 500+14 TO STA. 506+63 STA. 519+95 TO STA. 552+81 NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING



PROPOSED TYPICAL SECTION

STA. 506+63 TO STA. 513+27 NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING

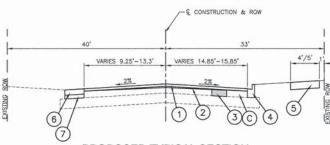
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

(CONTRACTOR SHALL MILL BEFORE PATCHING)

MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
PAVEMENT RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5 MM), 1 1/2"	4% @ 50 Gyr.	QCP
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4" MIN. & VARIES	4% @ 50 Gyr.	QC/QA
PAVEMENT PATCHING		
HOT-MIX ASPHALT BINDER COURSE IL-19.0mm, N70, 7" (IN 2 LIFTS)	4% @ 70 Gyr.	QC/QA
HMA DRIVEWAYS		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 MM) (1 3/4")	4% @ 50 Gyr.	QC/QA
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (2 1/4")	4% @ 50 Gyr.	QC/QA
HMA SHOULDER		
HOT-MIX ASPHALT SHOULDER , 8"	4% @ 50 Gyr.	QC/QA
QMP OPTIONS: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA); QUALITY CONTROL FOR P	PERFORMANCE (QCP), PA	AY FOR PERFORMANCE (PFP)

APPROXIMATE STATIONS AS THE ENGINEER.

NOTE: CLASS D PATCHES, TYPE I, II, III & IV AT SHOWN ON THE PLANS OR AS DIRECTED BY



PROPOSED TYPICAL SECTION

STA. 513+27 TO STA. 519+94

NOTE: CONTRACTOR SHALL MILL BEFORE PATCHING

EXISTING LEGEND

- HOT MIX ASPHALT SURFACE REMOVAL, 2 1/2"
- EXISTING CURB & GUTTER TO BE REMOVED AT LOCATIONS SHOWN \bigcirc B ON PLANS OR DIRECTED BY ENGINEER
- (0) EXISTING HOT-MIX ASPHALT PAVEMENT
- EXISTING PCC SIDEWALK TO BE REMOVED AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER 0
- E EXISTING HMA SIDEWALK

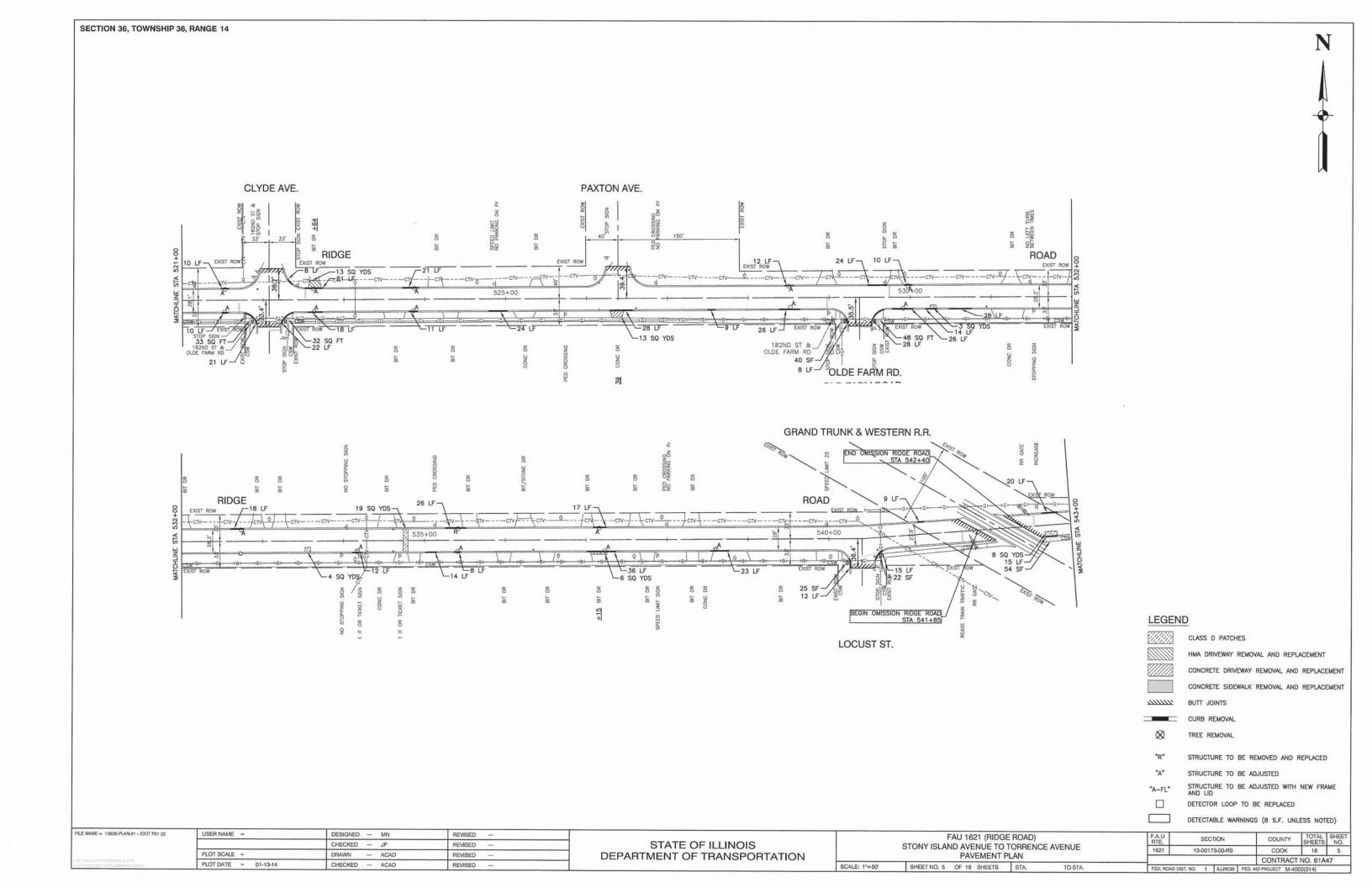
PROPOSED LEGEND

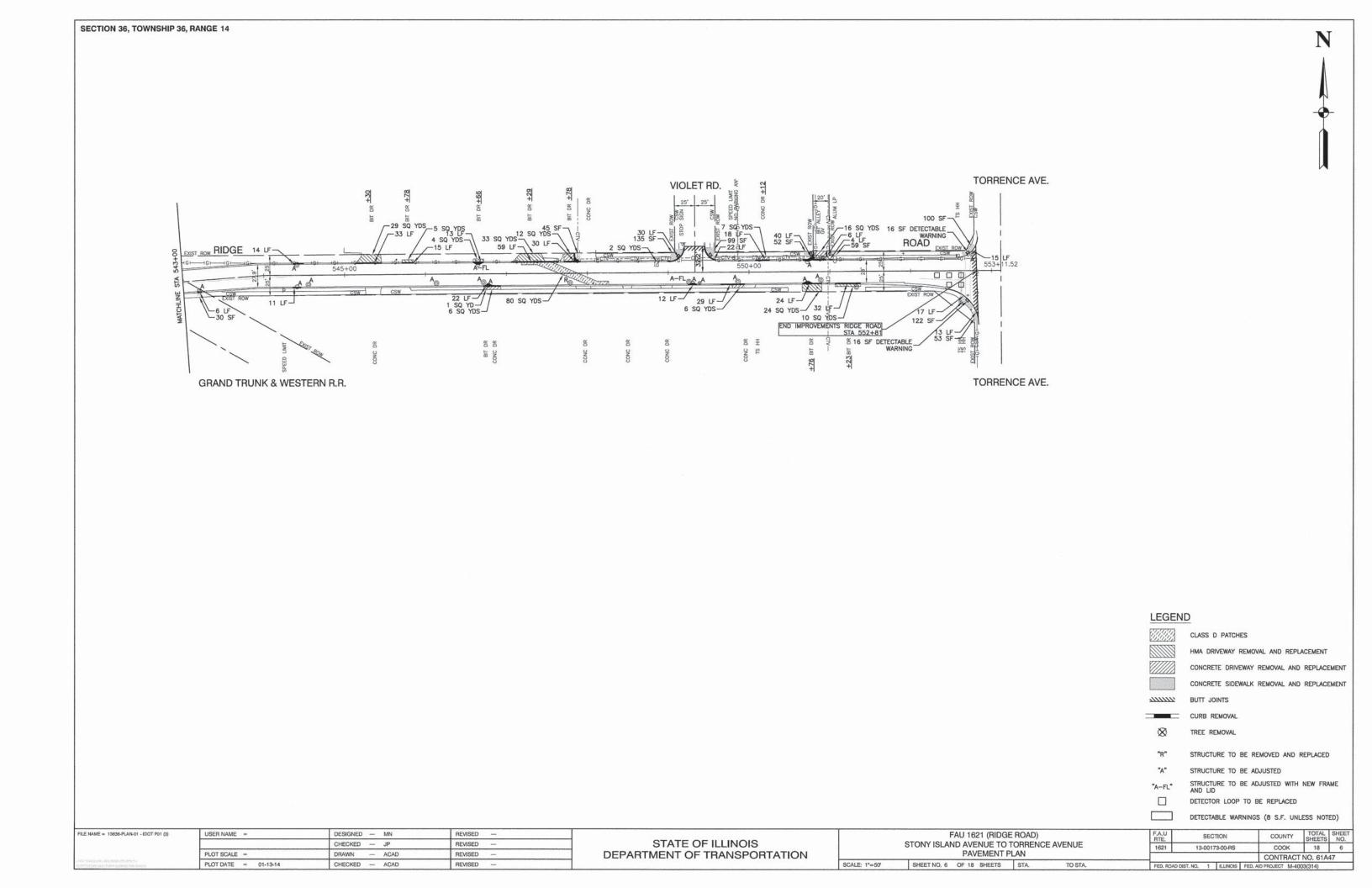
- HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50, 2"
- 2 POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"
- (3) CLASS D PATCH, 7" AT LOCATIONS SHOWN ON PLANS OR DIRECTED BY ENGINEER
- PROPOSED CURB AND GUTTER TO BE INSTALLED AT LOCATIONS SHOWN ON PLAN OR DIRECTED BY ENGINEER (IN KIND)
- PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (REPLACEMENT AT LOCATIONS DIRECTED BY THE ENGINEER) (5)
- 6 PROPOSED HMA SHOULDER, 8"
- (7) SUBBASE GRANULAR MATERIAL, TYPE C, 4"

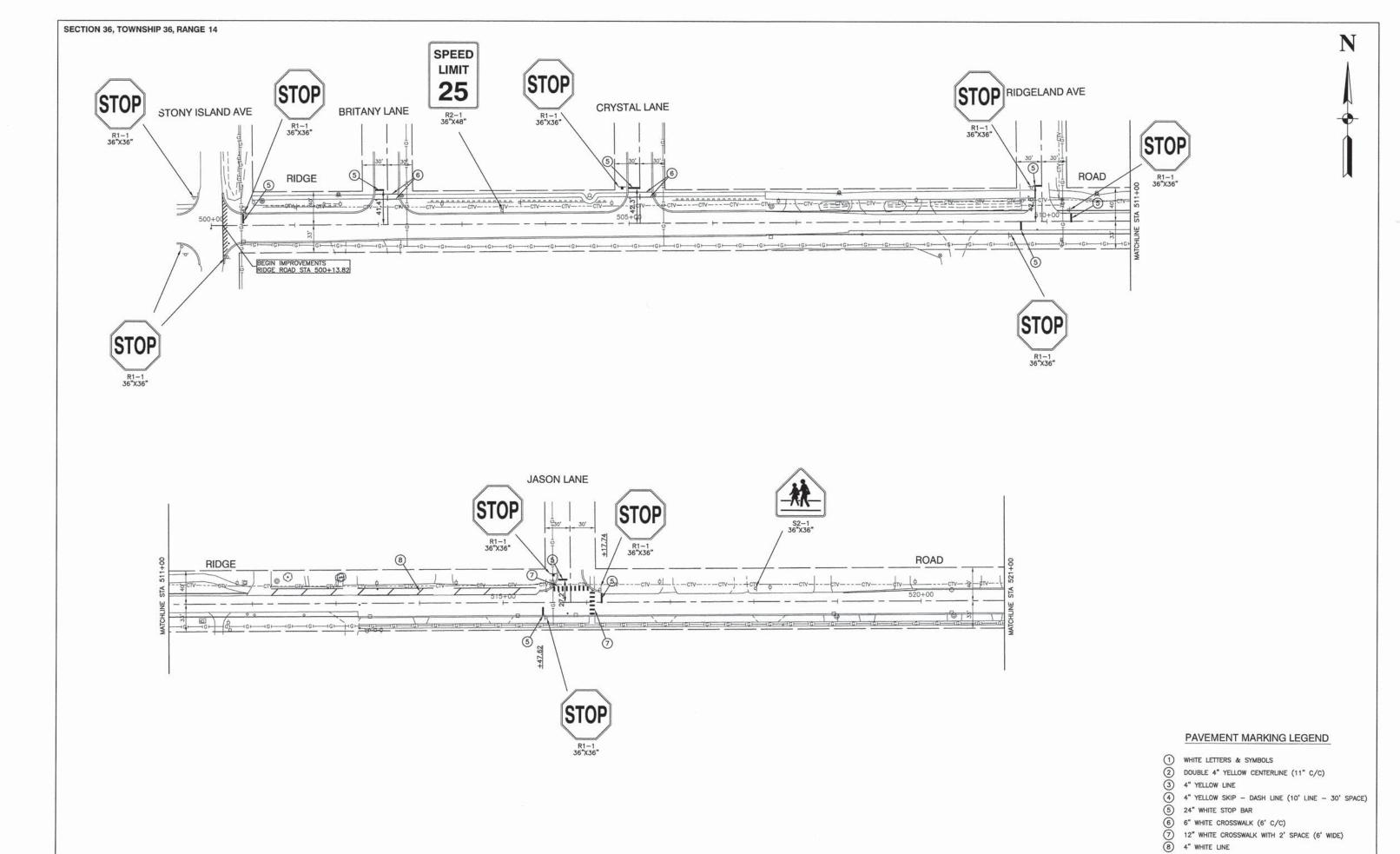
1	THE	UNIT	WEIGHT	USED	TO	CALCULATE	ALL	HMA	SURFACE	MIXTURE	QUANTITIES	IS	112	LBS/SQ	YD/IN.	

2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS. QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA

FILE NAME = 13636-TYPX-01 - TYPX-01 USER NAME = DESIGNED - MN REVISED FAU 1621 (RIDGE ROAD) SHEETS NO. SECTION COUNTY STATE OF ILLINOIS STONY ISLAND AVENUE TO TORRENCE AVENUE CHECKED - JP REVISED COOK 13-00173-00-RS TYPICAL CROSS SECTIONS DEPARTMENT OF TRANSPORTATION PLOT SCALE = DRAWN - MED REVISED CONTRACT NO. 61A47 SHEET NO. 3 OF 18 SHEETS STA. PLOT DATE = 01-13-14 FED, ROAD DIST, NO. 1 ILLINOIS FED, AID PROJECT M-4003(314)







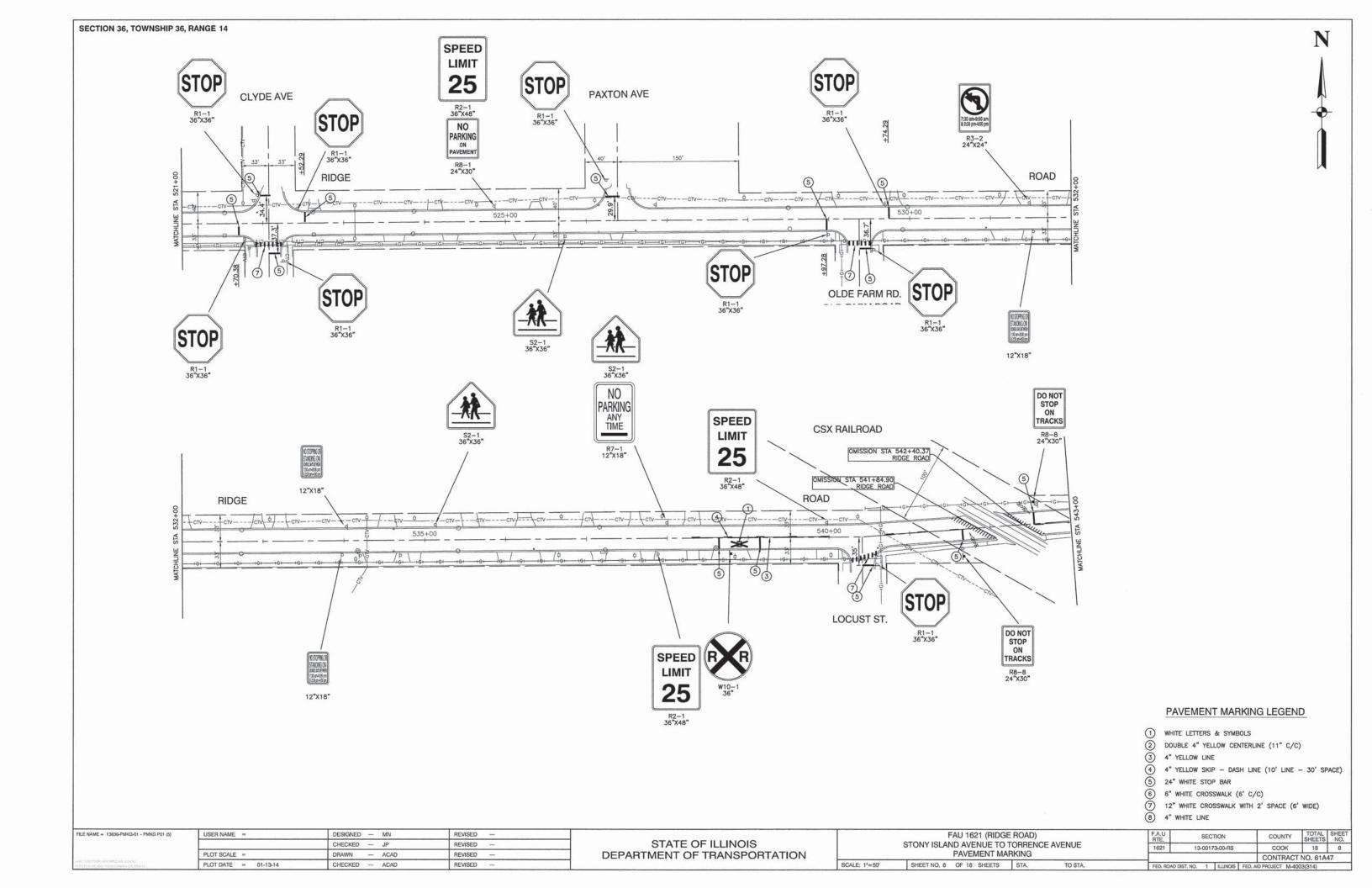
USER NAME =	DESIGNED — MN	REVISED —
	CHECKED — JP	REVISED —
PLOT SCALE =	DRAWN — ACAD	REVISED —
PLOT DATE = 01-12-14	CHECKED - VCVD	DEVICED

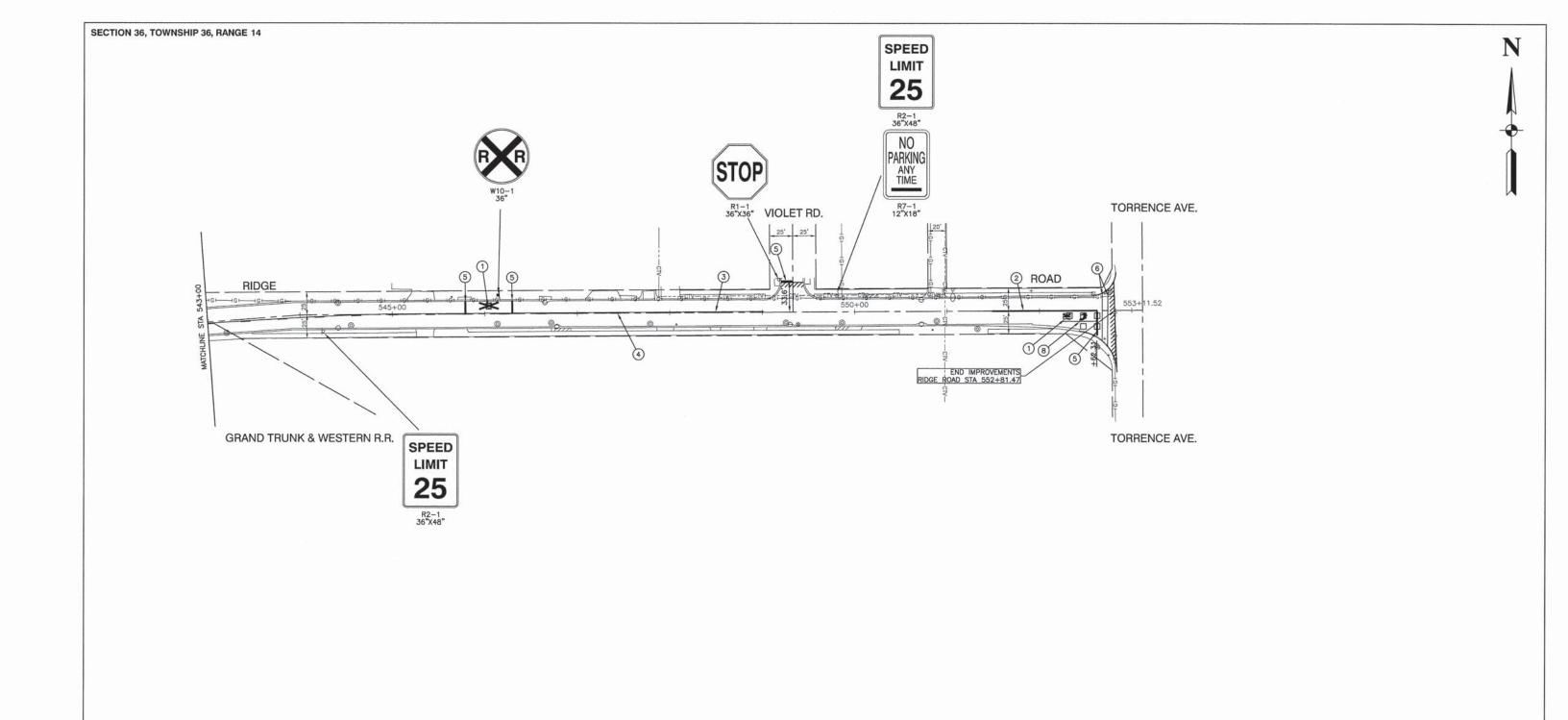
FILE NAME = 13636-PMKG-01 - PMKG P01 (4)

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION FAU 1621 (RIDGE ROAD)
STONY ISLAND AVENUE TO TORRENCE AVENUE
PAVEMENT MARKING

SHEET NO. 7 OF 18 SHEETS STA. TO STA.

SCALE: 1"=50"





PAVEMENT MARKING LEGEND

- 1 WHITE LETTERS & SYMBOLS
- DOUBLE 4" YELLOW CENTERLINE (11" C/C)
 4" YELLOW LINE
- 4" YELLOW SKIP DASH LINE (10' LINE 30' SPACE)
- 5 24" WHITE STOP BAR
- 6 6" WHITE CROSSWALK (6' C/C)
- 12" WHITE CROSSWALK WITH 2' SPACE (6' WIDE)
- 8 4" WHITE LINE

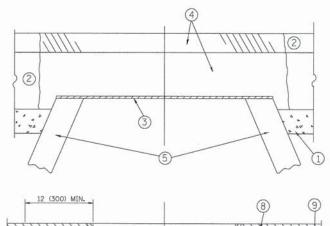
FILE NAME = 13636-PMKG-01 - PMKG P01 (6)	USER NAME =	DESIGNED - MN	REVISED —	
	OCCITIVANCE	CHECKED — JP	REVISED —	
	PLOT SCALE =	DRAWN — ACAD	REVISED —	DEPAR*
LARP MANYERS MALWELL CALLEGE 1) PRINCES OF SERVICE SERVICES STANDARD STANDARD	PLOT DATE = 01-13-14	CHECKED — ACAD	REVISED —	

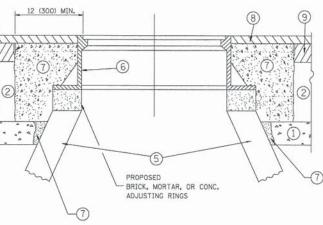
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STONY ISLA	ND AVE	21 (RIDG NUE TO MENT MA	TORRENC	E AVENUE	
SHEET NO. 9	OF 18	SHEETS	STA.	TO STA.	

SCALE: 1"=50"

F.A.U RTE.	S	ECTION		COUNTY	TOTAL	SHEET NO.
1621	13-0	0173-00-RS		COOK	18	9
				CONTRACT	NO. 61A	47
FED DOLD !	NOT NO	4	men an	II	001011	





NOTES:

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM
- 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 11/2 (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 PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- * UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER.

LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-1* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

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:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SUPERACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

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

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

NAME	DATE
R. SHAH	10/25/94
R. SHAH	01/30/95
R. SHAH	03/10/95
A. ABBAS	03/21/97
R. WIEDEMAN	05/14/04
R. BORO	01/01/07
R. BORO	03/09/11
R. BORO	12/06/11

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: VERT. NONE

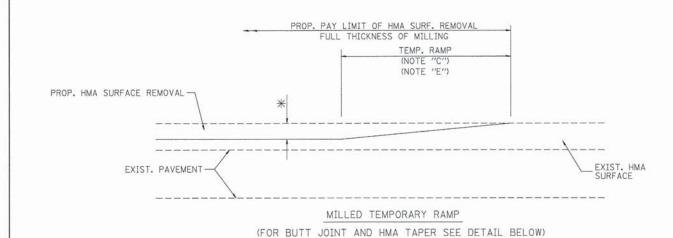
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STATE OF ILLINOIS

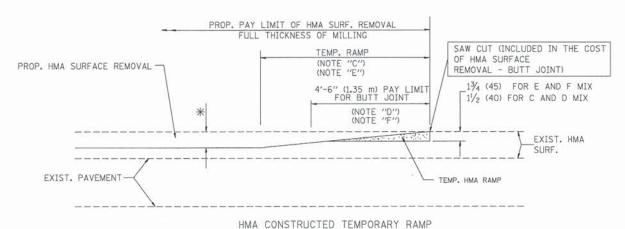
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
FRAMES AND LIDS ADJUSTMENT WITH MILLING

SCALE: NONE SHEET NO. 10 OF 18 SHEETS STA. TO STA.

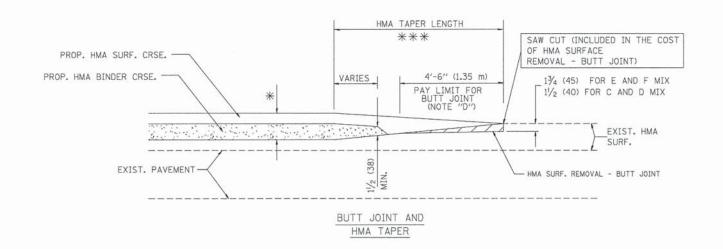


OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2 TYPICAL TEMPORARY RAMP



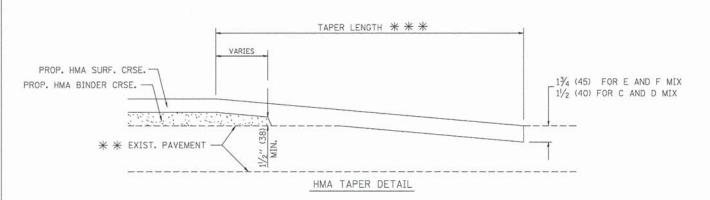
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")
15'-0" (4.5 m) (NOTE "B")
(NOTE "D")

** ** EXIST. PAVEMENT

BUTT JOINT DETAIL

PROP. HMA OR PCC



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.

BASIS OF PAYMENT:

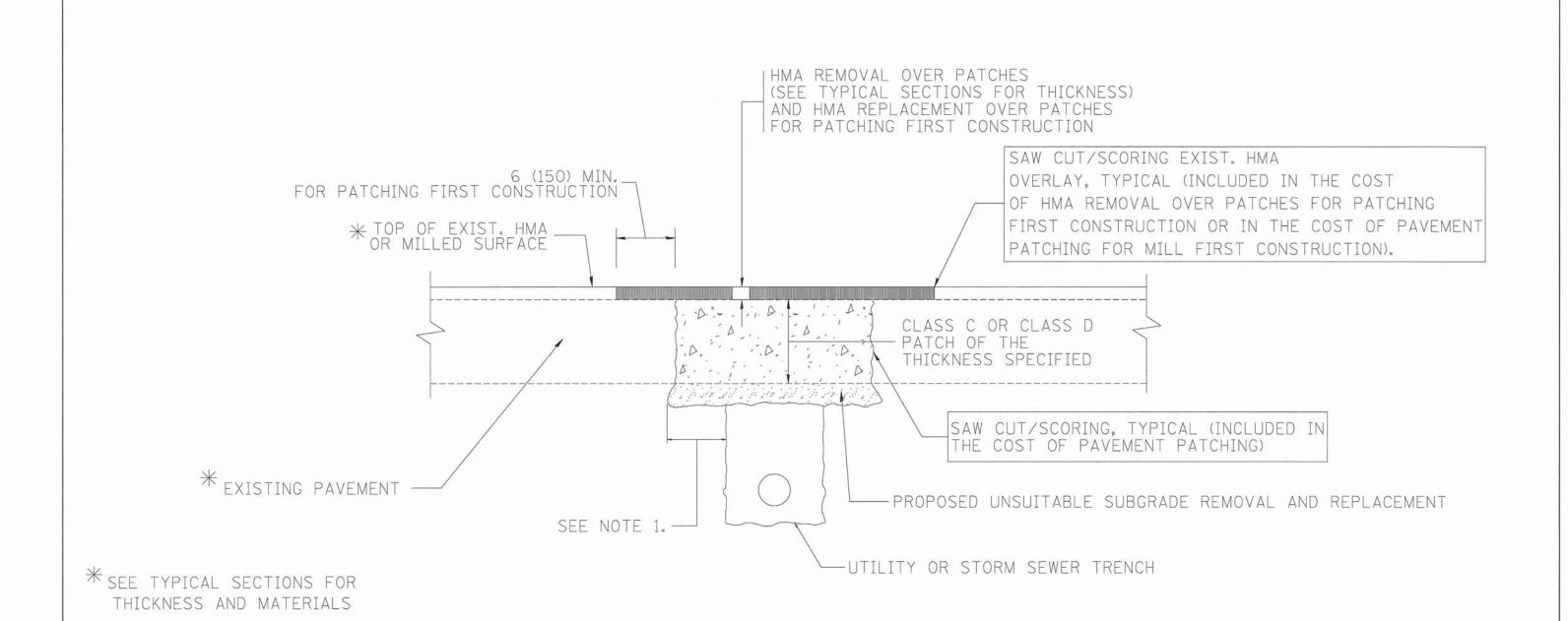
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
W:\distatd\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

	DISTRICT ONE				TION	COUNTY	SHEETS	NO.
	BUTT JOINT AND HMA TAPER			13-0017	73-00-RS	COOK	18	11
	DETAILS				BD32	CONTRACT	NO. 61A	47
SCALE: NONE	SHEET NO. 11 OF 18 SHEETS	STA. TO STA.	FED, I	ROAD DIST, NO. 1	ILLINOIS FED.	AID PROJECT M-40	03(314)	



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)

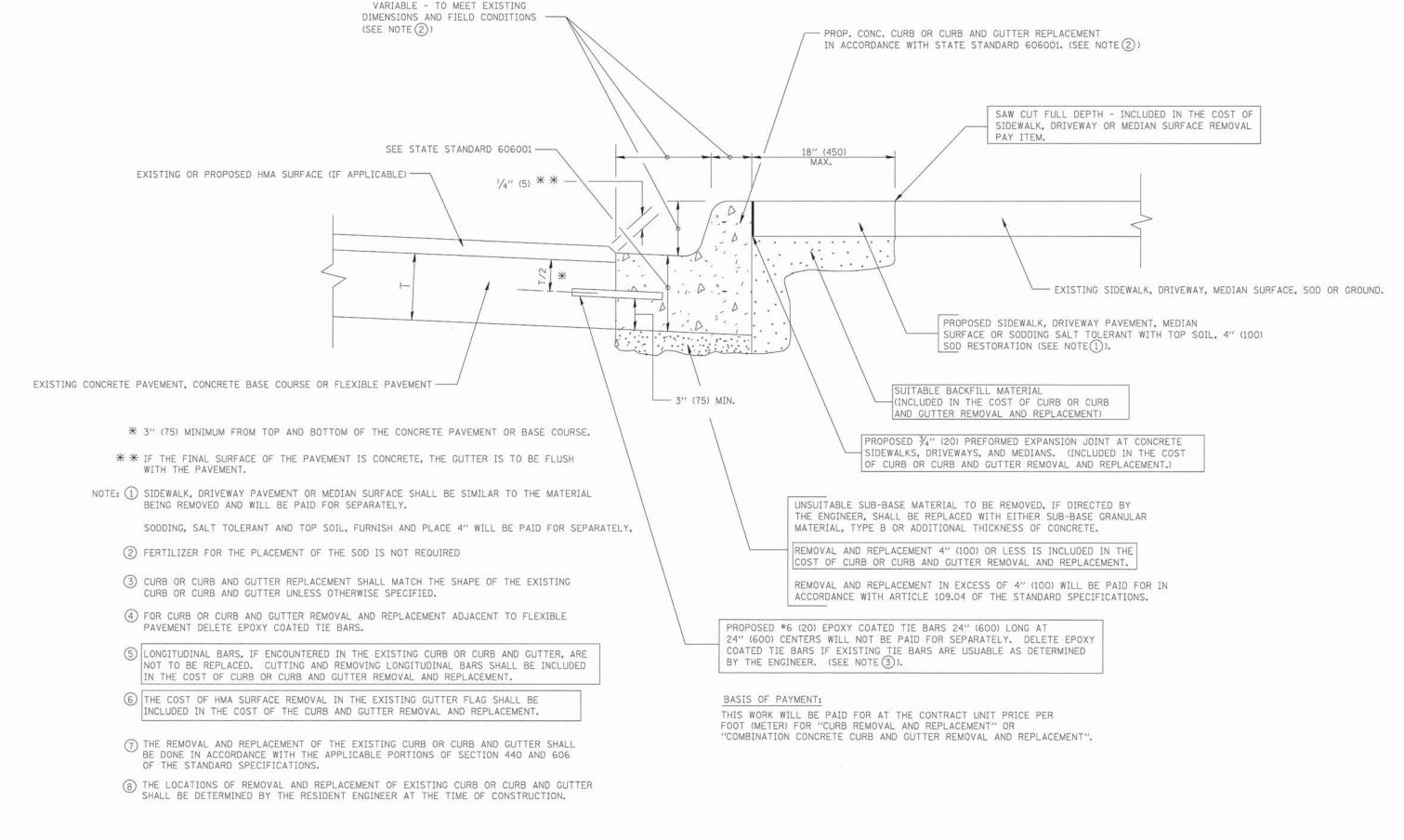
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

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.

DESIGNED - R. SHAH FILE NAME = USER NAME = bauerdl REVISED - A. ABBAS 04-27-98 DISTRICT ONE TOTAL SHEET NO. SECTION COUNTY STATE OF ILLINOIS PAVEMENT PATCHING FOR c:\projects\diststd22x34\bd22.dgn DRAWN REVISED - R. BORO 01-01-07 13-00173-00-RS COOK 18 12 HMA SURFACED PAVEMENT CHECKED DEPARTMENT OF TRANSPORTATION PLOT SCALE = 50.000 '/ IN. REVISED - R. BORO 09-04-07 BD400-04 (BD-22) CONTRACT NO. 61A47 PLOT DATE = 10/27/2008 K. ENG 10-27-08 SHEET NO. 12 OF 18 SHEETS STA. DATE



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

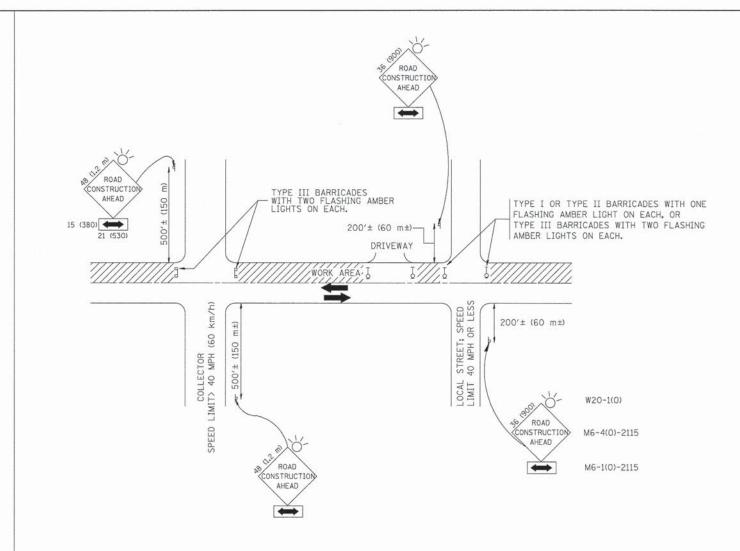
SCALE: NONE

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

FILE NAME = USER 1	IAME = drivakoagn	DESIGNED -	A. HOUSEH	REVISED	-	R. SHAH 10-03-96
o:\pw.work\pwidot\drivakoagn\d0108315\bd24.dgn		DRAWN -		REVISED	-	A. ABBAS 03-21-97
PLOT S	SCALE = 50.000 '/ IN.	CHECKED -		REVISED	-	M. GOMEZ 01-22-01
PLOT (DATE = 12/15/2009	DATE -	03-11-94	REVISED	*	R. BORO 12-15-09

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT		F.A.U RTE.	SECTION	COUNTY	TOTAL	
			1621	13-00173-00-RS	COOK	18	13
			BD6	00-06 (BD-24)	CONTRACT	NO. 61A	47
	SHEET NO. 13 OF 18 SHEETS	STA. TO STA.	FED. ROAD D	IST. NO. 1 ILLINOIS FED	AID PROJECT M-40	003(314)	



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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 ROUTE.
- 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.
- 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 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- 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.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

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.

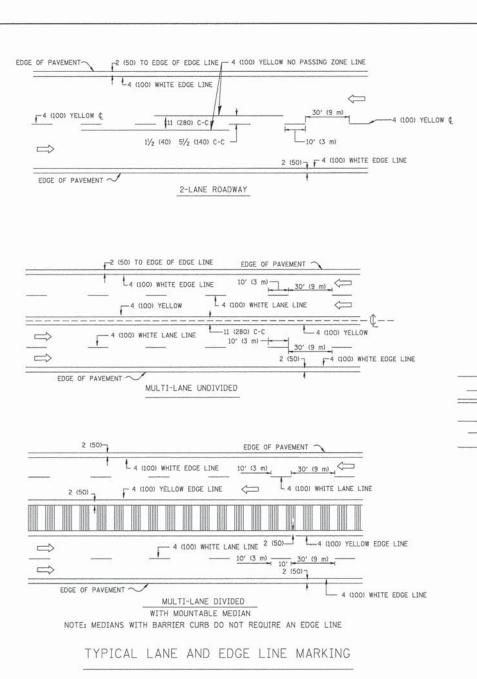
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

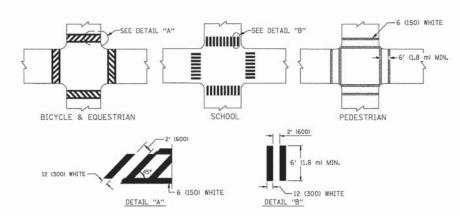
All dimensions are in millimeters (inches) unless otherwise shown.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

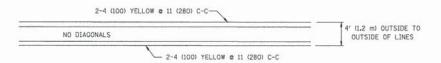
DISTRICT ONE
TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SHEET NO. 14 OF 18 SHEETS STA.

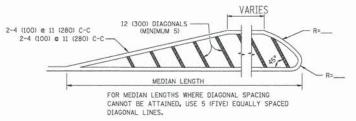




TYPICAL CROSSWALK MARKING

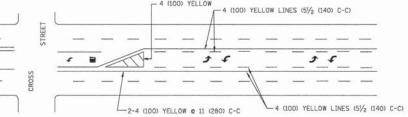


4' (1.2 m) WIDE MEDIANS ONLY



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

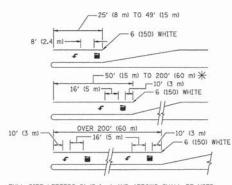


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

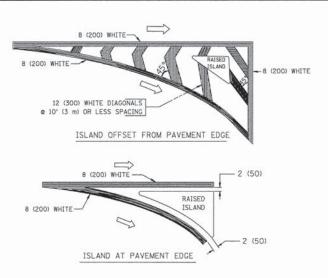
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) \P AREA = 20.8 SO. 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 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 WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED 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	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) 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°	SOLID SOLID SOLID	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 m²) EACH "X"=54.0 SO. FT. (5.0 m²)
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) T0 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.

TYPICAL TURN LANE MARKING

ı	FILE NAME =	USER NAME = drivakosgn	DESIGNED	-	EVERS	REVISED	-T.	RAMMACHER	10-27-94
	c:\pw_work\pwidot\drivakosgn\d0108315\tc	13.dgn	DRAWN	-		REVISED	-C.	JUCIUS	09-09-09
ı		PLOT SCALE = 50.000 ' / IN.	CHECKED	-		REVISED	-		
ı		PLOT DATE = 9/9/2009	DATE		03-19-90	REVISED	4		

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	1

Ī	DISTRICT ONE		F.A.U RTE.	SEC	TION	COUNTY	TOTAL	SHEET NO.		
				1621	13-0017	73-00-RS	COOK	18	15	
	TYPICAL PAVEMENT MARKINGS				TC-13	3	CONTRACT	NO. 61A	47	
	SCALE: NONE	SHEET NO. 15 OF 18 SHEETS	STA.	TO STA.	FED, ROAD D		-	AID PROJECT M-40	03(314)	

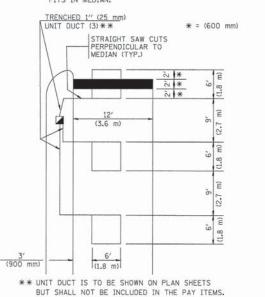
LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUA 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) * 1" (25 mm) UNIT DUCT-TRENCHED (3.0 m) (3.0 m) TO E/P .. * = (600 mm)** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

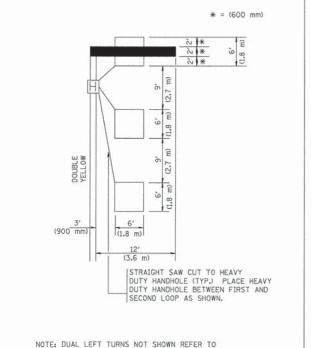
(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY MANUPULE 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 BIADOL OF EMPINE THE MEDIAN TO SEVEN THE MEDIAN IS MOUNTABLE. 814001 TO ENSURE THAT HANDHOLE



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

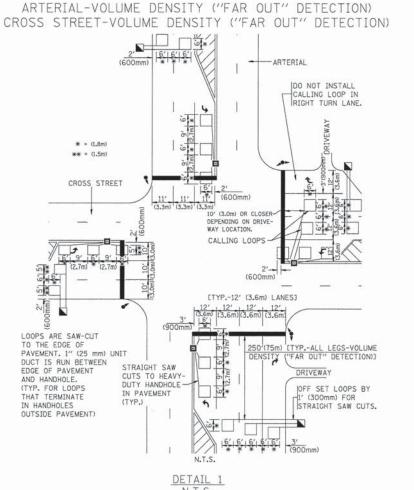
(PROTECTED / PERMITTED LEFT TURN PHASING)



SCALE: NONE

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT PLAN SHEET FOR DETECTOR LOOP REPLACEMENT ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

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



OFFSET LOOPS BY-' (300mm) FOR STRAIGHT SAW CUTS THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED. DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. UNIT DUCT -CROSS STREET 13'(900mm 10'(3.0m) PREFERRED 6, 9, 6, 9, 6, 15'(4.5m) MAXIMUM + - THESE DIMENSIONS RIVEWAY WILL BE VARIABLE [6' (1.8m) MINIMUM. 25' (7.6 m) MAXIMUM] 4 A - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS "FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER TAPER AREA. DO NOT COVER THE LEFT TURN DETAIL 2 LANE OR LEFT TURN LANE TAPER.

NOTES:

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED,
- * 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 ALL DETECTOR LOOPS SHALL BE SIX FEET
- * 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, EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE 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 I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

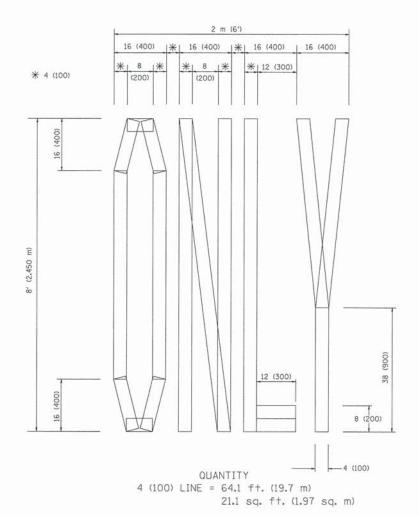
THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

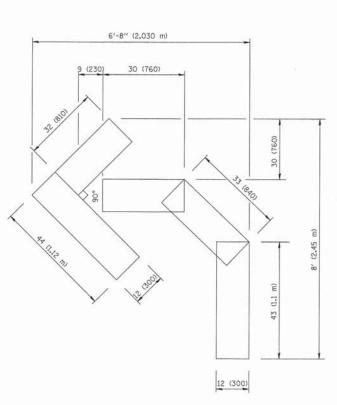
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -
W:\d:atatd\22x34\ta@7.dgn		DRAWN -	REVISED -
h)	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - D DETAILS FOR				
SHEET NO. 16 OF	18 SHEETS	STA.	TO STA.	

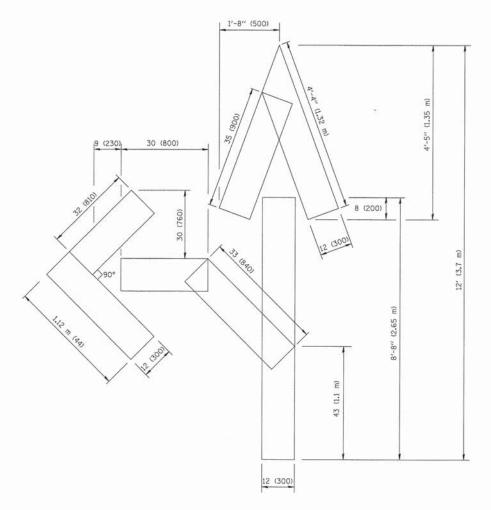
SECTION TOTAL SHEET SHEETS NO. 13-00173-00-RS соок 1621 TS-07 CONTRACT NO. 61A47 FED, ROAD DIST, NO. 1 ILLINOIS FED, AID PROJECT M-4003(314)





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

SCALE: NONE



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
W:\d:statd\22x34\tcl6.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

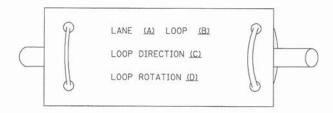
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

DIOTRICT ONE DAVEMENT MARKING LETTERS AND	F.A.U SECTION 1621 13-00173-00-RS		COUNTY TOTAL SHEETS		SHEET NO.
DISTRICT ONE - PAVEMENT MARKING LETTERS AND			соок	18	17
SYMBOLS FOR TRAFFIC STAGING		CONTRACT NO. 61A47			
SHEET NO. 17 OF 18 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(314)				-

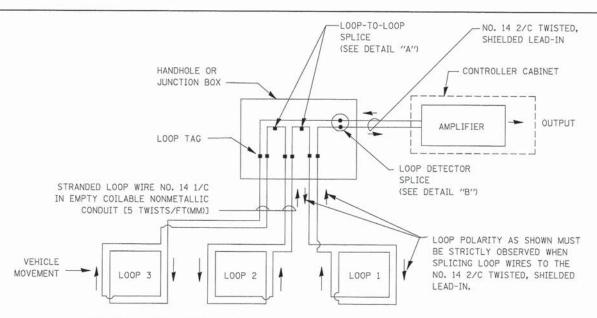
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

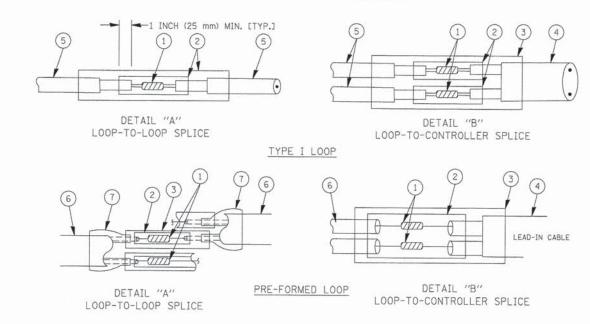


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
 THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- 2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
- (4) NO. 14 2/C TWISTED, SHIELDED CABLE.
- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- (6) PRE-FORMED LOOP
- The polyolefin 2 conductor breakout seals, tyco cbr-2 or approved equal

FILE NAME =	USER NAME = bouerdl	DESIGNED -	DAD	REVISED -	
c:\pw_work\PWIDOT\8AUERDL\dØ108315\ta05	dgn	DRAWN -	ВСК	REVISED -	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	DAD	REVISED -	
	PLOT DATE = 11/4/2009	DATE -	10-28-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.U SECTION			TOTAL SHEETS	
		1621	13-00173-00-RS	COOK	18	18
			TS-05		CONTRACT NO. 61A47	
SCALE: NONE	SHEET NO. 18 OF 18 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT M-4003(314)			