STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLANS FOR PROPOSED

FEDERAL-AID HIGHWAY

F.A.U. ROUTE 2734 (PFINGSTEN ROAD) WHITE PINE DRIVE TO KEYSTONE ROAD **SECTION 09-00150-00-RS**

PROJECT NO. ARA-9003(308)

VILLAGE OF NORTHBROOK COOK COUNTY

C-91-587-09

GROSS LENTH OF PROJECT: 3,800 L.F. = 0.725 MILES NET LENGTH OF PROJECT: 3,800 L.F. = 0.725 MILES

INDEX OF SHEETS

COVER SHEET
GENERAL NOTES, DETAIL AND SUMMARY OF QUANTITIES
TYPICAL SECTIONS
ROADWAY PLAN SHEETS
PAVEMENT MARKING PLAN SHEETS

PAVEMENT MARKING PLAN SHELIS

DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND CURB OR EDGE < 4.5M (15')

DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB OR EDGE < 4.5m (15')

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

BUITT JOINT AND BITUMINOUS TAPER DETAILS

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS

RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
DISTRICT ONE TYPICAL PAVEMENT MARKINGS
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TEMPORARY INFORMATION SIGNING

DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING PAVEMENT PATCHING AND HMA SURFACED PAVEMENT

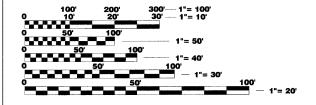
HIGHWAY STANDARDS

000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
424001-05 CURB RAMPS FOR SIDEWALKS
442201-03 CLASS C AND D PATCHES
604076-04 FRAMES AND GRATES TYPE 21
606001-04 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04 PC CONCRETE ISLANDS AND MEDIANS
701606-06 URBAN LANE CLOSURE, MULTILANE, ZW WITH MOUNTABLE MEDIAN
701701-06 URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04 LANE CLOSURE MULTILANE INTERSECTION
701801-04 LANE CLOSURE MULTILANE IN OR ZW CROSSWALK OR SIDEWALK CLOSURE

701901-01 TRAFFIC CONTROL DEVICES
780001-02 TYPICAL PAYEMENT MARKINGS
781001-03 TYPICAL PAYEMENT MARKINGS
886001-01 DETECTOR LOOP INSTALLATIONS

TRAFFIC DATA: ADT 15,000 VPD (2006)

POSTED SPEED LIMIT - 40 MPH DESIGN SPEED LIMIT - 45 MPH CLASSIFICATION: ATERIAL

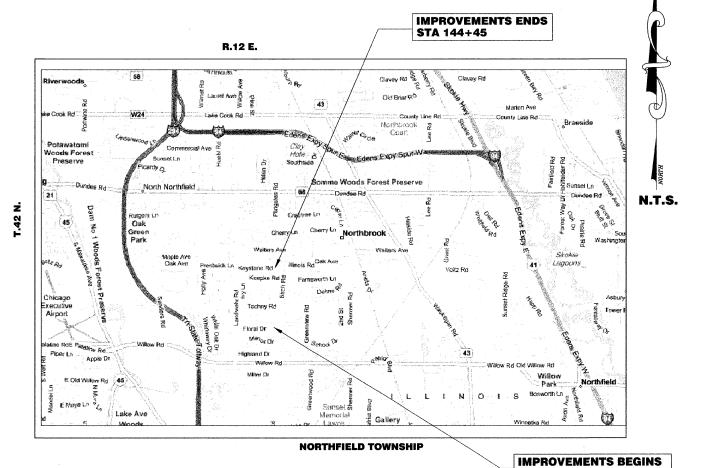


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.

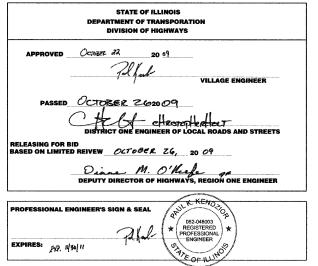
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

CONTRACT NO. 63362



SECTION 2734 09-00150-00-RS COOK 23





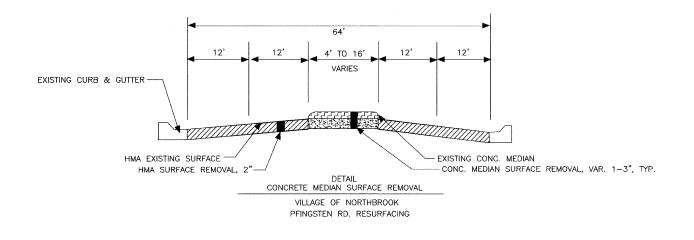
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL PERFORM ALL WORK IN THIS CONTRACT IN A MANNER THAT CONFORMS WITH THE NORTHBROOK MUNICIPAL CODE. THE CONTRACTORS ATTENTION IS DRAWN SPECIFICALLY TO PROVISIONS OF THE MUNICIPAL CODE REGARDING CONSTRUCTION EQUIPMENT TRACKING MUD ON PUBLIC STREETS (SEC. 16-1) AND DUST CONTROL (SEC. 16-25).
- 2. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO HEREAFTER AS "STANDARD SPECIFICATIONS"), AND IT'S SUPPLEMENTAL REFERENCES, PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION AND THE "STANDARDS AND SPECIFICATIONS FOR PUBLIC AND PRIVATE IMPROVEMENTS", PUBLISHED BY THE VILLAGE OF NORTHBROOK, SHALL BE INCORPORATED BY REFERENCE INTO THIS CONTRACT. ANY CONTRADICTION BETWEEN THESE REFERENCES UNRESOLVED BY THE SPECIAL PROVISIONS SHALL BE INTERPRETED BY THE ENGINEER.
- THE ASPHALT SURFACE SHALL BE MILLED IN A MANNER THAT WILL LEAVE THE EXISTING SURFACE 2 INCHES BELOW THE EDGE OF THE GUTTER FLAG WITH A CROSS SLOPE BETWEEN 1.5%

4. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THE SHORT TERM PAVEMENT MARKING FROM THE FINAL SURFACE JUST PRIOR TO OR JUST FOLLOWING THE INSTALLATION OF THE PERMANENT PAVEMENT MARKING. THE COST OF THE REMOVAL SHALL BE INCLUDED IN THE COST OF "SHORT TERM PAVEMENT MARKING".

- 5. COMBINATION CONCRETE CURB AND GUTTER SHALL BE MEASURED STRAIGHT ACROSS DRIVEWAYS AND TRANSITIONS. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR THE CURB AND GUTTER TRANSITION
- 5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THIS PROJECT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR FAILURE TO VERIFY EXISTING DIMENSIONS OR CONDITIONS.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER OR OWNER. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- 8. ONLY PRECAST CONCRETE ADJUSTMENT RINGS SHALL BE ALLOWED FOR THE ADJUSTMENT OF CATCH BASINS, MANHOLES, VALVE VAULTS AND INLETS.
- 9. CRUSHED CONCRETE SHALL NOT BE INSTALLED ON THIS CONTRACT, EXCEPT FOR TEMPORARY PURPOSES WHERE IT WILL BE COMPLETELY REMOVED FROM THE SITE.
- 10. THE CONTRACTOR SHALL ERECT "FRESH OIL" SIGNS PRIOR TO THE PLACEMENT OF THE PRIME COAT AND COMMENCEMENT OF PAVING OPERATIONS.
- 11. THE CONTRACTOR SHALL BE REQUIRED TO DISPOSE OF ALL SIDEWALKS, CURB AND GUTTER, PAVEMENT AND ALL OTHER MATERIALS EXCAVATED OR REMOVED DUE TO THE PROPOSED IMPROVEMENTS. ALL EXCESS EXCAVATED SHALL BE REMOVED FROM THE WORKSITE ON THE DAY OF ITS EXCAVATION. NO ADDITIONAL PAYMENT SHALL BE MADE FOR HAULING THESE MATERIALS OUTSIDE THE PROJECT LIMITS.
- 12. THE ACTUAL QUANTITIES FOR: PCC SW 5"; C&G REM & REP; AND CLASS D PATCHES WILL NOT EXCEED THE QUANTITY LISTED IN THE SUMMARY OF QUANTITIES.
- 13. IF PAVEMENT PATCHING OPERATIONS PRECEDE ASPHALT MILLING OPERATIONS, THE CONTRACTOR SHALL PROVIDE A SMOOTH, DRIVEABLE SURFACE FREE OF ABRUPT GRADE CHANGES AT HIS/HER OWN EXPENSE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 14. ALL WORK NECESSARY TO RESTORE DISTURBED AREAS WILL NOT BE MEASURED FOR PAYMENT, BUT THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE ITEM CAUSING THE
- 15. FRAMES AND GRATES, TYPE 21 SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAYS" AND A SIDEVIEW OF A FISH STAMPED OR CAST INTO THE TOP SIDE OF CURB BACK.



SPECIALTY ITEM	ITEM NO.	DESCRIPTION	UNIT	xxxx-xx
	40600100	BITUM INOUS MATERIALS (PRIME COAT)	GALLON	2700
	40600300	AGGREGATE (PRIME COAT)	TON	60
	40600400	MIXTURES FOR CRACKS, JOINTS AND FLANGEWAYS	TON	10
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	1200
	40600895	CONSTRUCTING TEST STRIP	EACH	1
	40600982	HOT MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQYD	270
	40603340	HOT MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2350
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	1000
	42400800	DETECTABLE WARNINGS	SQ FT	100
	44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SQYD	25000
	44000600	SIDEWALKREMOVAL	SQFT	1100
	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVALAND REPLACEMENT	FOOT	500
	44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQFT	18000
	44201749	CLASS D PATCHES, TYPE I, 9 INCH	SQYD	320
	44201753	CLASS D PATCHES, TYPE II, 9 INCH	SQYD	320
	44201757	CLASS D PATCHES, TYPE III, 9 INCH	SQYD	320
	44201759	CLASS D PATCHES, TYPE IV, 9 INCH	SQYD	320
	44300100	AREA REFLECTIVE CRACK CONTROL TREATMENT	SQYD	27000
	60252800	CATCHBASINS TO BE RECONSTRUCTED	EACH	5
,	60300310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL.)	EACH	30
4	60404920	FRAMES AND GRATES, TYPE 21	EACH	1
	67100100	MOBILIZATION	LSUM	1
	70102625.	TRAFFIC CONTROL AND PROTECTION STANDARD - 701606	LSUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION STANDARD - 701701	LSUM	1
	70102640	TRAFFIC CONTROL AND PROTECTION STANDARD - 701801	LSUM	1
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	6000
*	78000100	THERM OPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	250
*	78000200	THERM OPLASTIC PAVEMENT MARKING - LINE, 4"	FOOT	14600
*	78000400	THERM OPLASTIC PAVEMENT MARKING - LINE, 6"	FOOT	3000
*	78000600	THERM OPLASTIC PAVEMENT MARKING - LINE, 12"	FOOT	300
*	78000650	THERM OPLASTIC PAVEMENT MARKING - LINE, 24"	FOOT	500
*	78100100	RAISED REFLECTOR PAVEMENT MARKER	EACH	350
*	78300200	RAISED REFLECTOR PAVEMENT MARKER REMOVAL	EACH	140
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	480
	X0322256	TEM PORARY INFORMATION SIGNING	SQ FT	100
	XX006947	HOT MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQYD	250

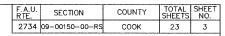
VILLAGE OF NORTHBROOK

PFINGSTEN ROAD RESURFACING GENERAL NOTES, DETAIL AND SUMMARY OF QUANTITIES

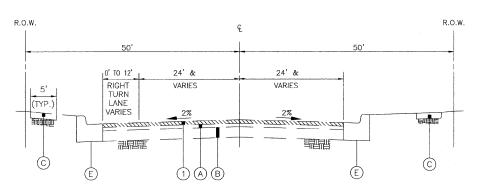
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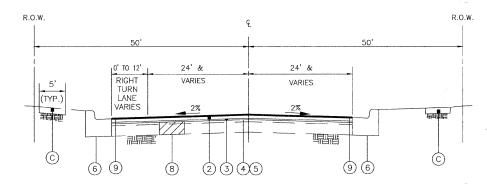
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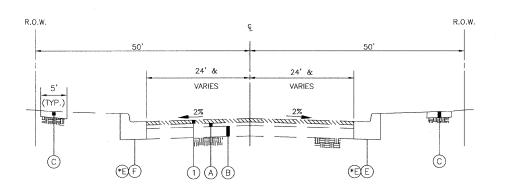
CONTRACT: 63362



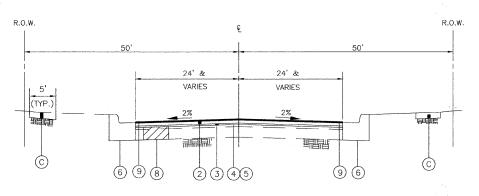
EXISTING TYPICAL SECTION STA. 106+45 TO 107+00



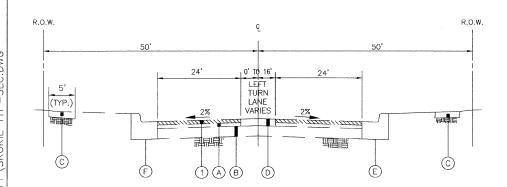
PROPOSED TYPICAL SECTION STA. 106+45 TO 107+00



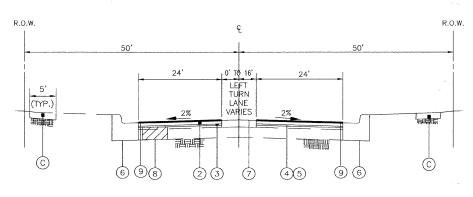
EXISTING TYPICAL SECTION *STA. 107+00 TO 110+00 STA. 143+00 TO 144+45



PROPOSED TYPICAL SECTION *STA. 107+00 TO 110+00 STA. 143+00 TO 144+45



EXISTING TYPICAL SECTION STA. 110+00 TO 143+00



PROPOSED TYPICAL SECTION STA. 110+00 TO 143+00

- (A) EXISTING ASPHALT COURSE
- B EXISTING P.C.C. BASE COURSE
- © EXISTING P.C.C. SIDEWALK
- (D) CORRUGATED CONCRETE MEDIAN
- E COMB. CONC. CURB & GUTTER, TYPE B-6.12
- (1) HOT MIX ASPHALT SURFACE REMOVAL, 2"
- 2 HOT MIX ASPHALT, MIX D, N70, IL-9.5MM, (1-1/2")
- (3) HOT MIX ASPHALT LEVELING BINDER IL-9.5 (MACHINE METHOD), N70 (3/4")
- (4) BITUMINIOUS MATERIALS (PRIME COAT)
- (5) AGGREGATE (PRIME COAT)
- © COMB. CONC. CURB & GUTTER REMOVAL AND REPLACEMENT, AS DIRECTED BY THE ENGINEER
- (7) CONCRETE MEDIAN SURFACE REMOVAL
- (8) CLASS D PATCHES, BINDER IL-19MM, 9", AS SHOWN ON PLANS AND DIRECTED BY THE ENGINEER
- 9 HMA SURFACE COURSE TO BE 1/4" ABOVE GUTTER FLAG, (TYP.)

** "CONTRACTOR SHALL MILL BEFORE PATCHING"

HOT MIX ASPHALT MIXTURE TABLE

IIXTURE USE	DESIG	N	AIR	VOIDS
IOT MIX ASPHALT, MIX D, N70, IL-9.5MM	4%	0	70	GYR.
IMA LEVELING BINDER IL-9.5 (MACHINE METHOD), N70	4%	0	70	GYR.
LASS D PATCHES, BINDER IL-19MM, TYPE I-IV, 9 IN.,	4%	0	70	GYR.
IMA SURF. CSE., MIX C, IL-9.5MM, N50 (DRIVEWAY)	4%	0	50	GYR.

1. THE UNIT WEGIHT USED TO CALCULATE ALL ASPHALT MIXTURES IS 112 LBS./SQ.YD./IN.

3. "FOR PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS."

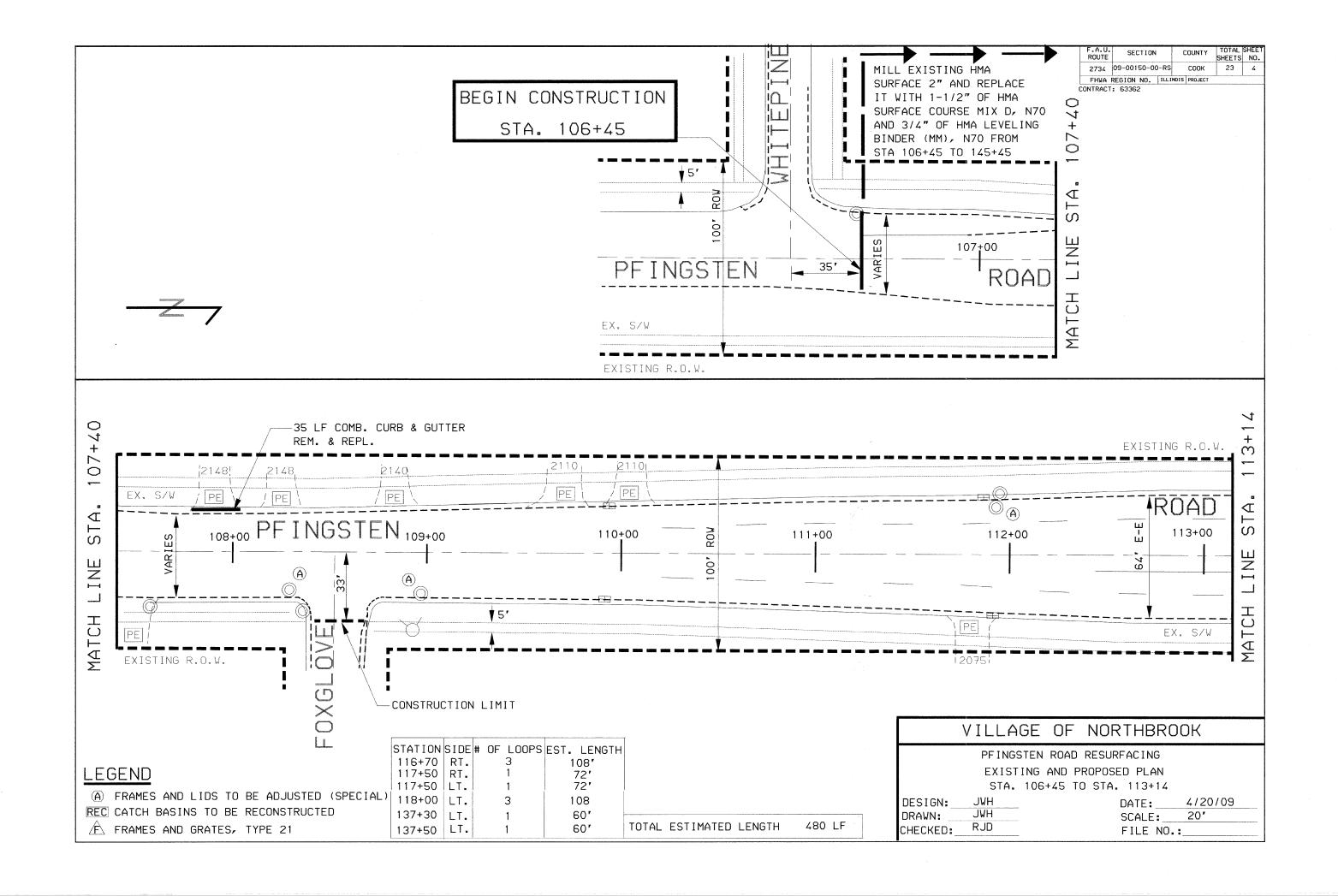
VILLAGE OF NORTHBROOK

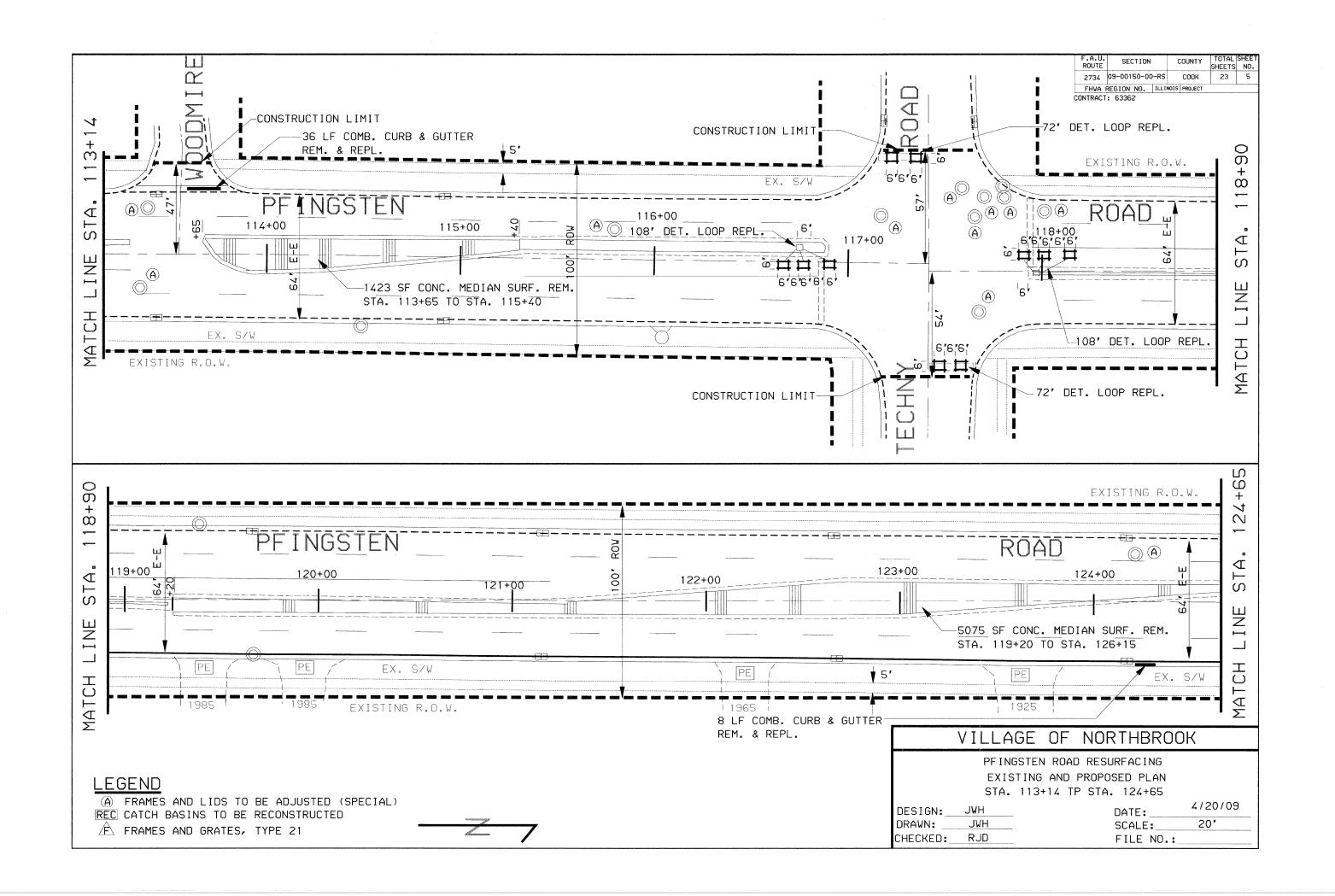
PFINGSETN ROAD RESURFACING TYPICAL SECTION

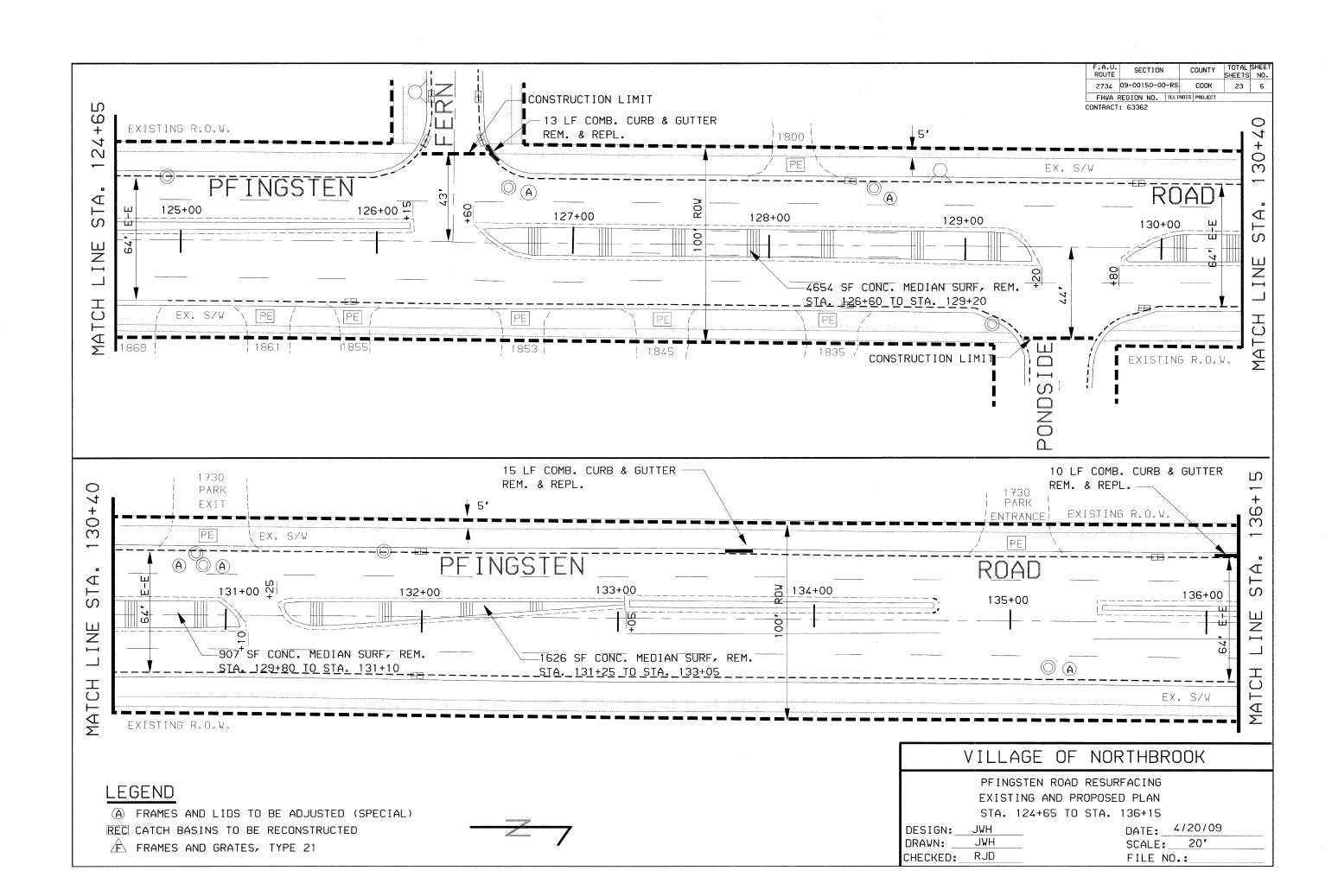
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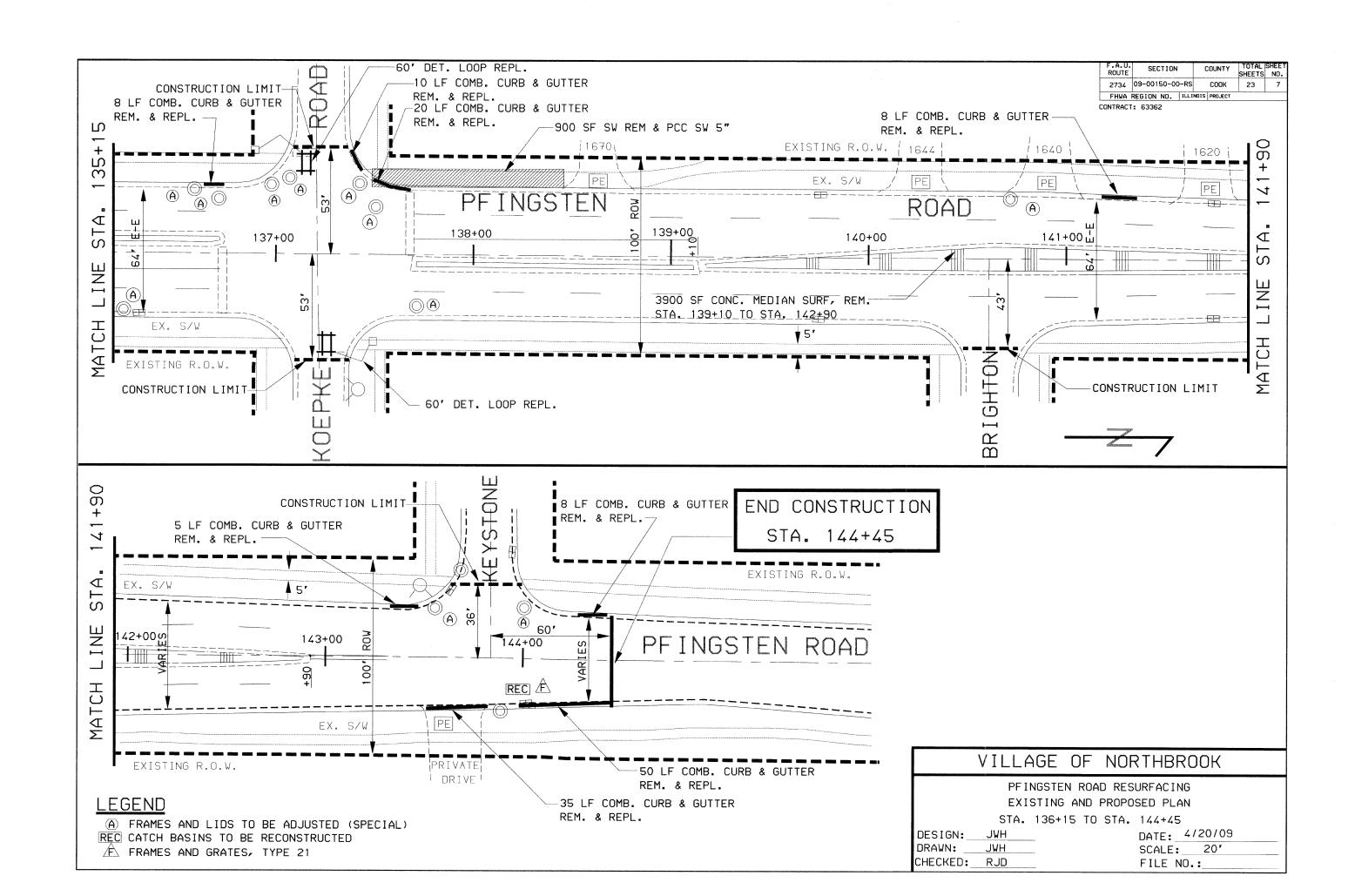
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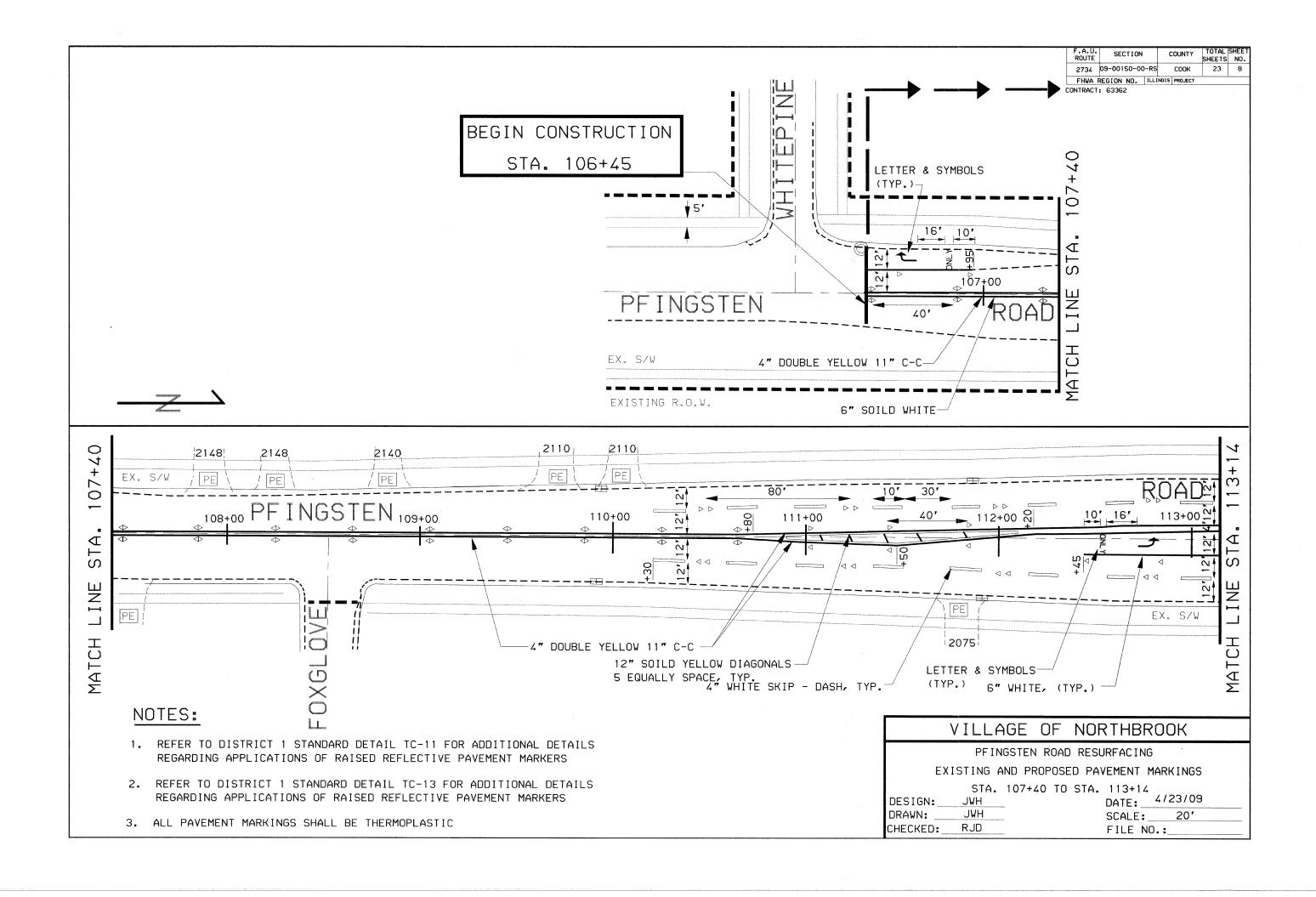
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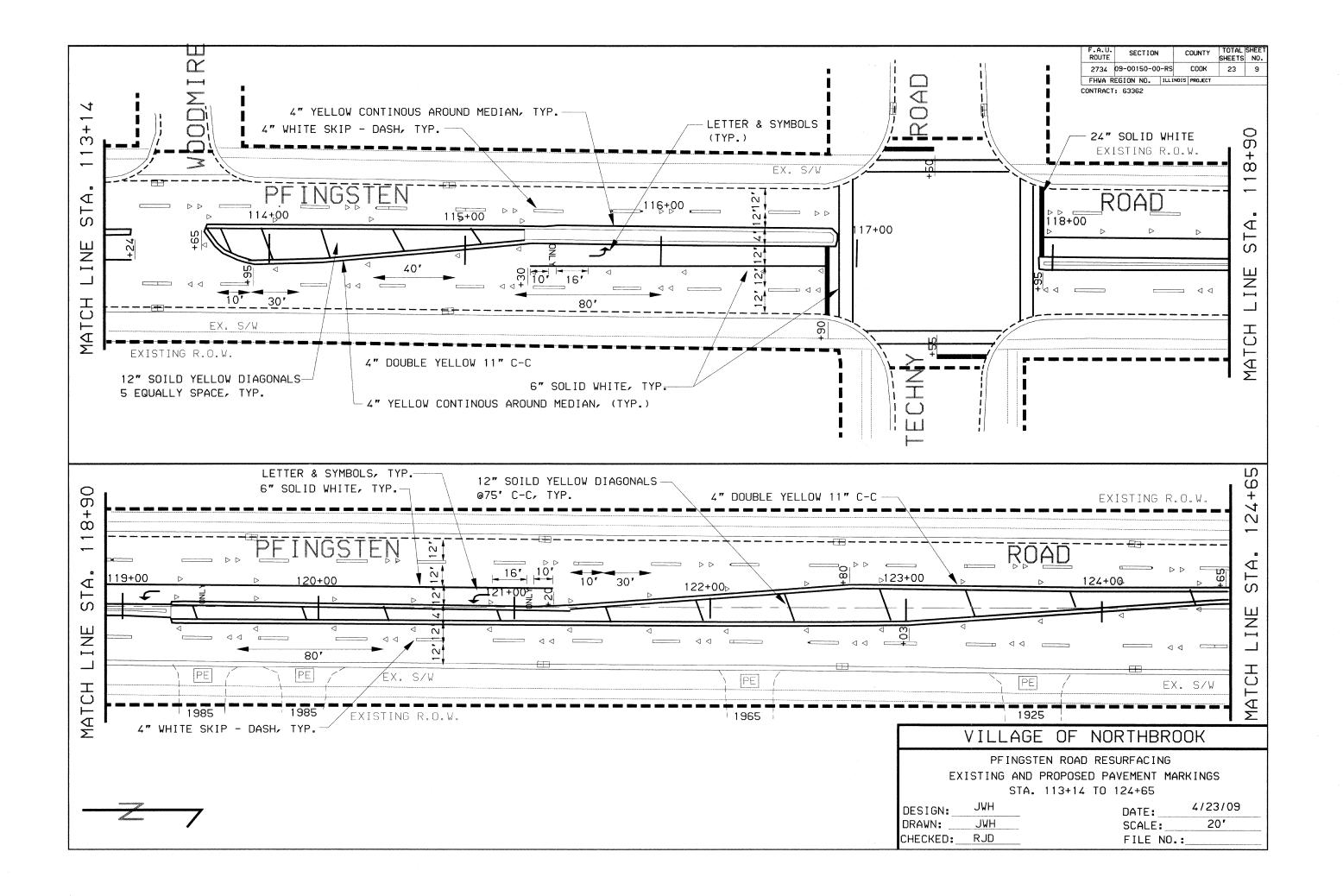


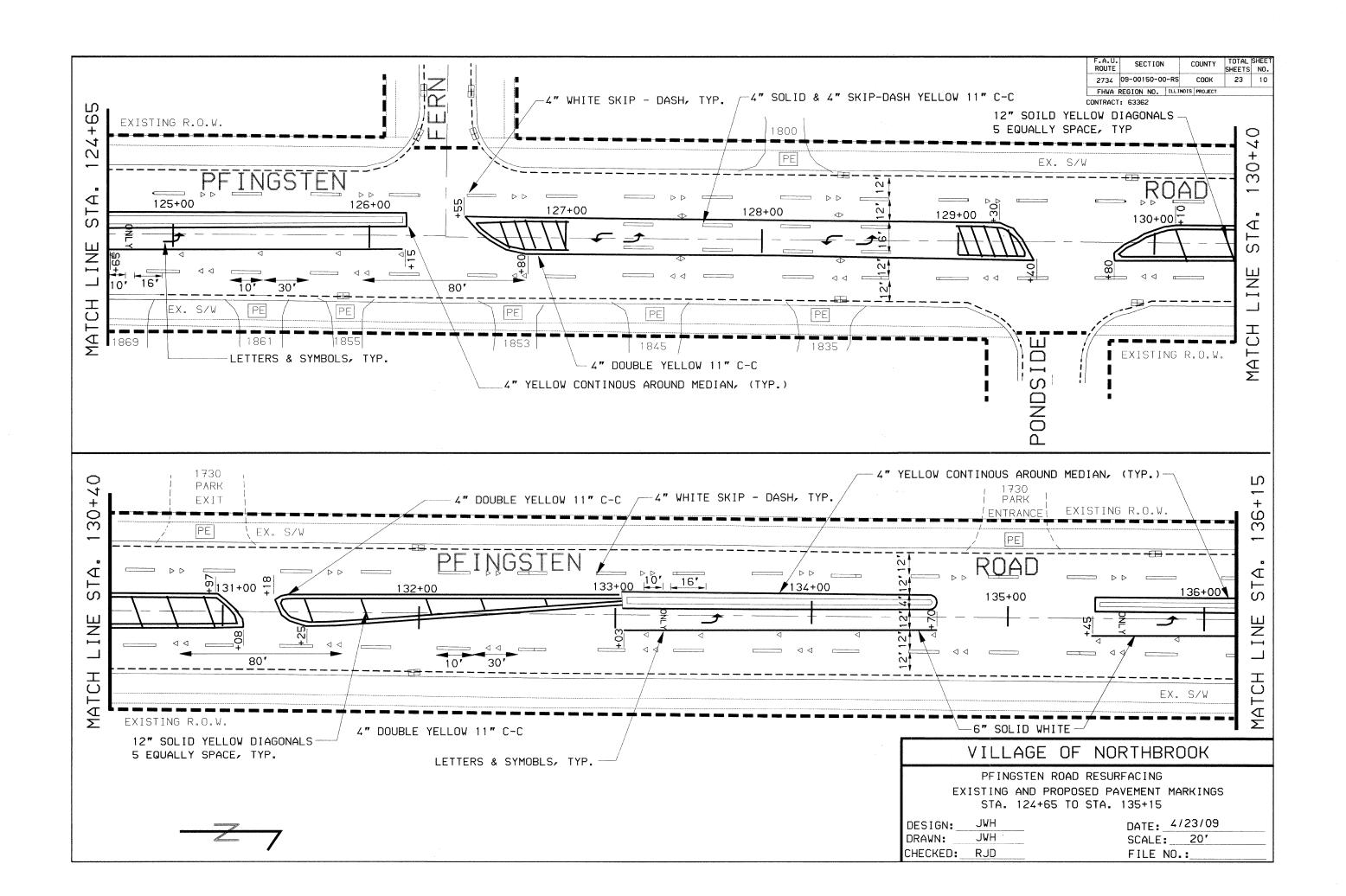


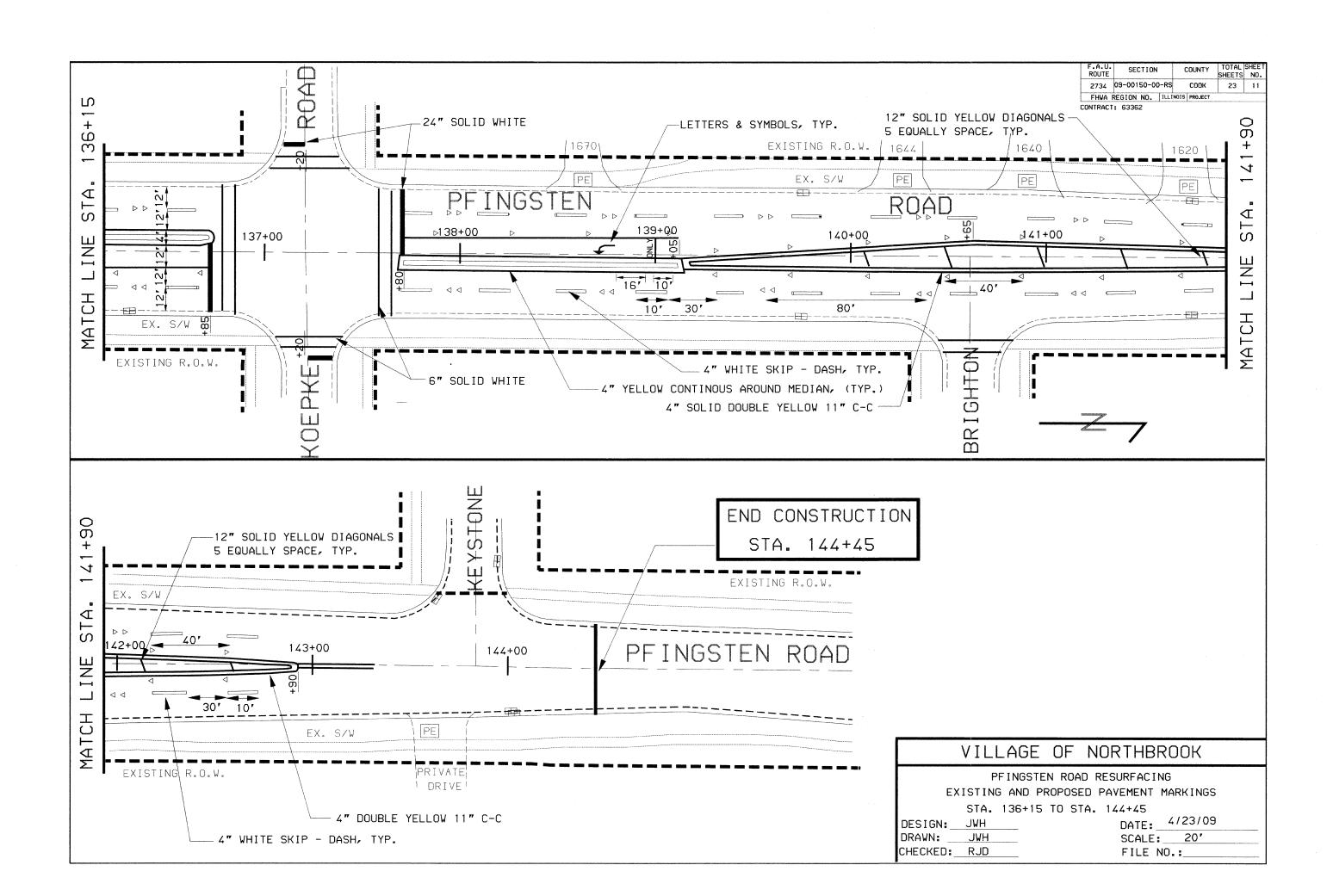


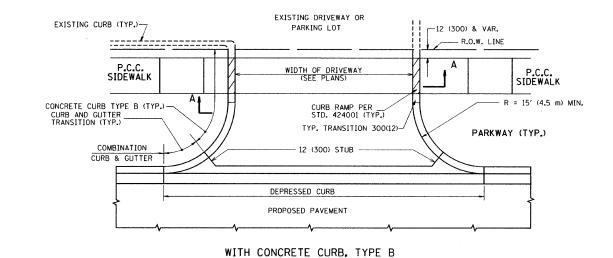


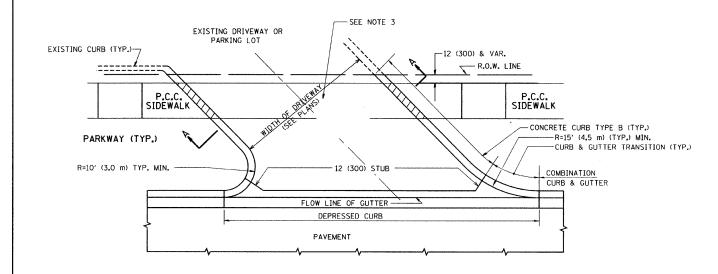




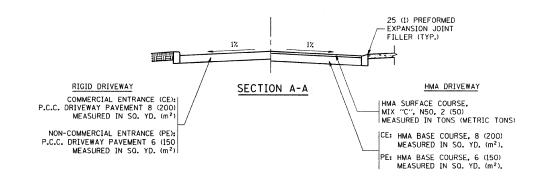


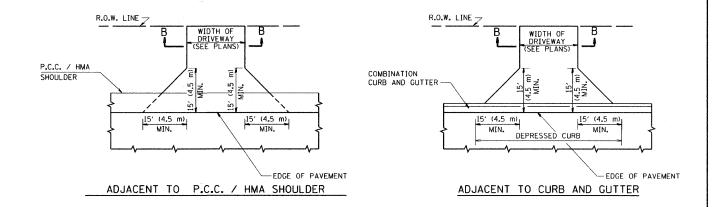


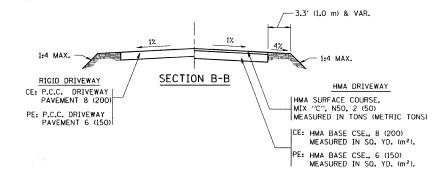




WITH CONCRETE CURB, TYPE B







MEAS

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REOUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

GENERAL NOTES:

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

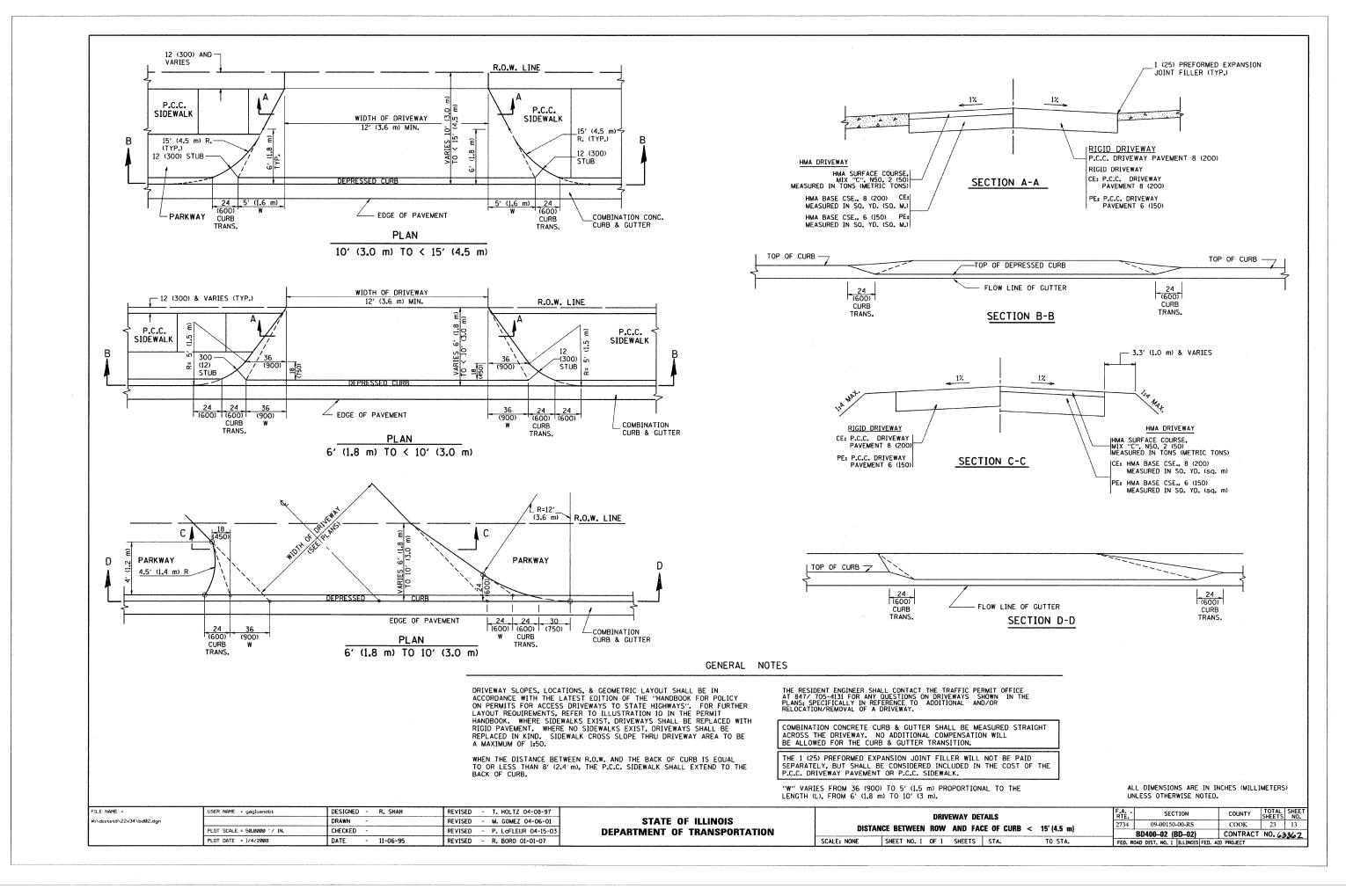
RURAL FIELD ENTRANCE (FE) HMA SURFACE COURSE, MIX "C", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

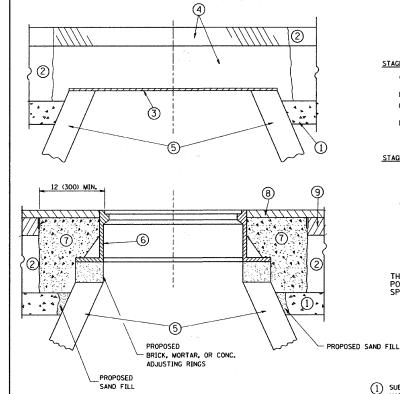
AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m²).

FILE NAME =	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01	
<:\distatd22x34\bd01.dgn		DRAWN -	REVISED - P. LaFLUER 04-15-03	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED - R. BORO 01-01-07	
	PLOT DATE = 6/11/2008	DATE - 11-04-95	REVISED - R. BORO 06-11-08	

DF	RIVEWAY	DETA	ILS -	- DISTANCE	BETWEE	N R.O.1	N.	
AND	FACE OF	CURE	8	EDGE OF SI	HOULDER	>=	15' (4.5 m)	
SCALE: NONE	SHEET !	NO. 1	OF 1	SHEETS	STA.		TO STA.	

F.A RTE.	SEC	CTION		COUNTY	TOTAL SHEETS	SHEET NO.
2734	09-001:	50-00-RS		COOK	23	12
	BD0156-07	(BD-01)		CONTRACT	T NO.6336	
FED. R	DAD DIST. NO. 1	ILLINOIS	FED. AI	D PROJECT		





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 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 SI CONCRETE, OR HMA SURFACE 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.

LEGEND

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

LOCATION OF STRUCTURES:

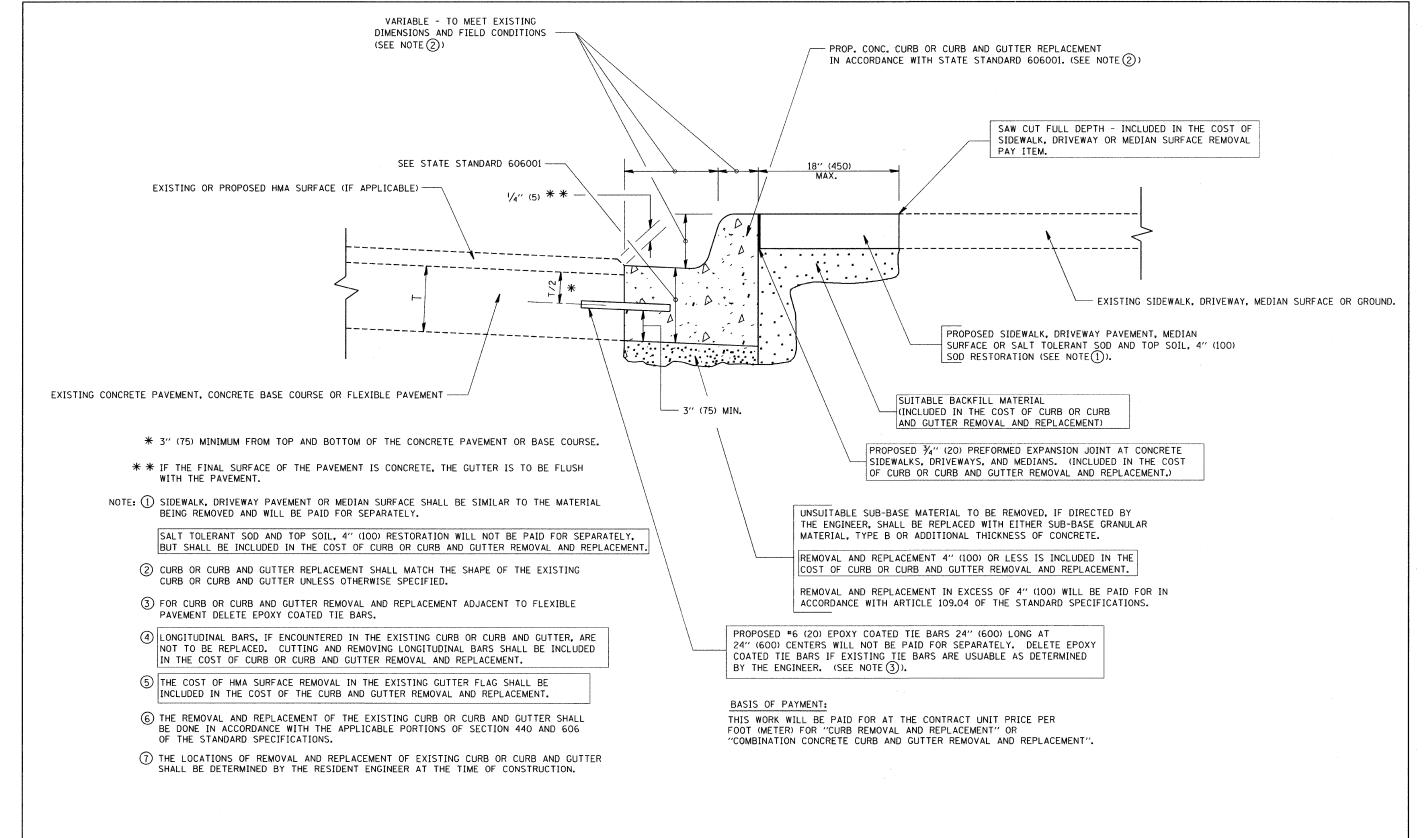
THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT: 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.

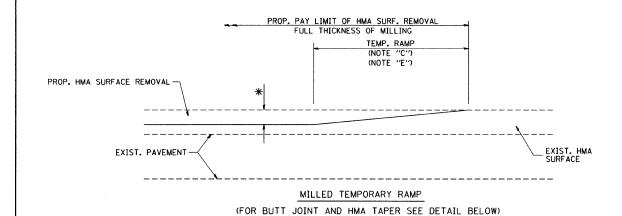
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

FILE NAME =	USER NAME = gaglianobt	DESIGNED - R. SHAH	REVISED - R. SHAH 03-10-95			DETAILS FOR	F.A.	SECTION		TAL SHEET
W:\d:ststd\22x34\bdØ8.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	FRAMES AND LIDS ADJUSTMENT WITH MILLING		2734	09-00150-00-RS	COOK 2	23 14
	PLOT SCALE = 50.0000 '/ IN.	CHECKED ~	REVISED - R. WIEDEMAN 05-14-04	DEPARTMENT OF TRANSPORTATION					CONTRACT NO.	1.633/67
	PLOT DATE = 1/4/2008	DATE - 10-25-94	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD			-03302

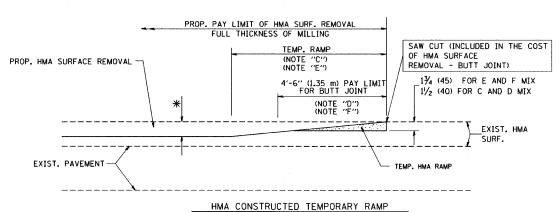


CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

[FILE NAME =	USER NAME = gaglianobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER	F.A	SECTION	COUNTY TOTA	L SHEET
	W:\diststd\22x34\bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			2734	09-00150-00-RS	COOK 23	3 10.
		PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT		BI	D600-06 (BD-24)	CONTRACT NO.	633/07
		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.	FED. ROAD		ID PROJECT	



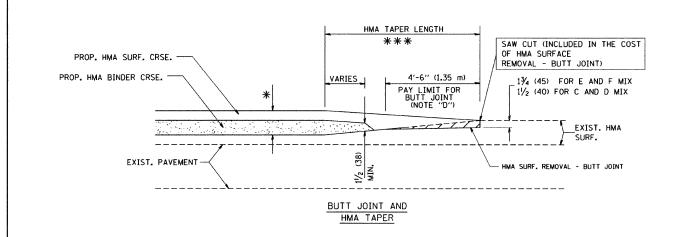
OPTION 1



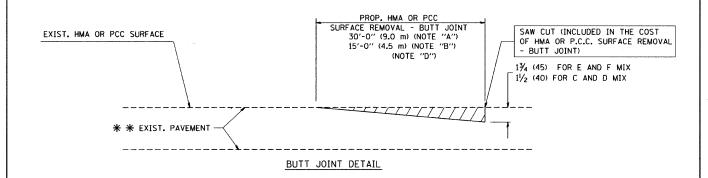
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

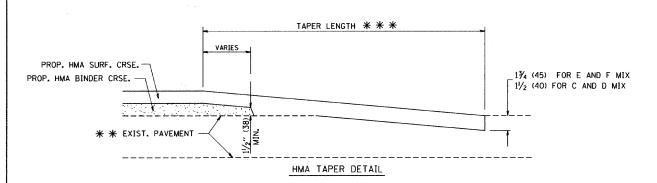
OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING





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".
- $m{st}$ SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

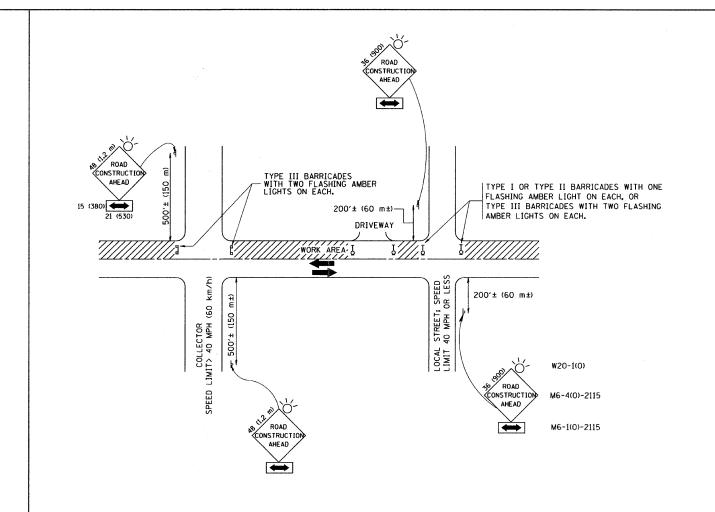
BASIS OF PAYMENT:

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".

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

STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

BUTT JOINT AND					F.A RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	HMA TAPER DETAILS					09-00150-00-RS	COOK	23	16
			,			BD400-05 BD32	CONTRACT	NO. 6	3362
CALE: NONE	SHEET NO. 1 OF	f 1 SHEETS	STA.	TO STA.	FED. RO	OAD DIST. NO. 1 ILLINOIS FED. A	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 1T 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 II 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:
- g) ONE ROAD CONSTRUCTION AHEAD SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON 1T 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.
- 3. 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).

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

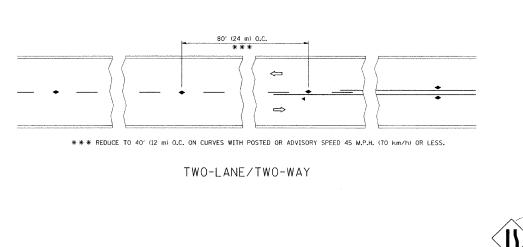
USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

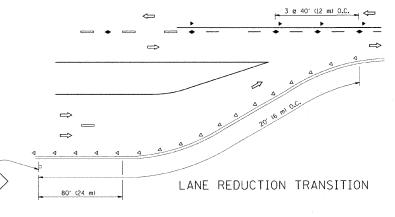
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

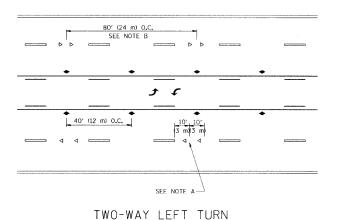
All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tc10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

TRAFFIC CONTROL AND PROTECTION FOR					SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS					COOK	23	17			
		J, AND DI	UVLIVAIO		TC-10	CONTRACT	NO. 63	362			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							







\$0' (24 m) 0.C.

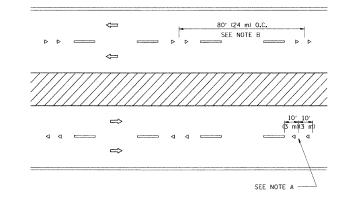
SEE NOTE B

40' (12 m) 0.C.

30' (24 m) 0.C.

30' (31 m)

MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

- MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. 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

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

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.

SYMBOLS

---- YELLOW STRIPE

WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/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.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE THAND INC.

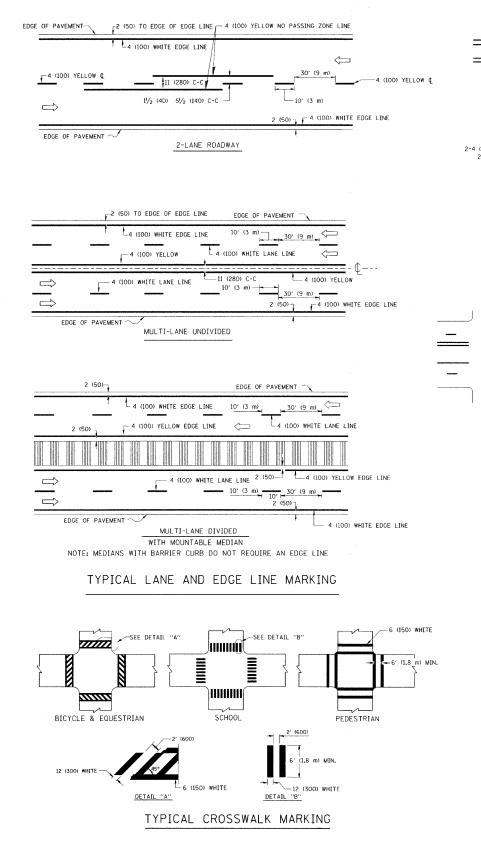
LEFT TURN

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

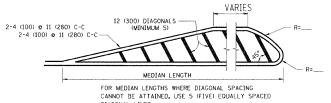
COUNTY SHEET NO.

COOK 23 18

CONTRACT NO. 63862 FILE NAME = DESIGNED REVISED - T. RAMMACHER 09-19-94 USER NAME = drivakosan TYPICAL APPLICATIONS STATE OF ILLINOIS DRAWN REVISED -T, RAMMACHER 03-12-99 c:\pw_work\pwidot\drivakosan\d0108315\4 2734 09-00150-00-RS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) PLOT SCALE = 50.000 '/ IN CHECKED REVISED ~T. RAMMACHER 01-06-00 **DEPARTMENT OF TRANSPORTATION** TC-11 CONTR PLOT DATE = 9/9/2009 DATE REVISED - C. JUCIUS 09-09-09 SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA.

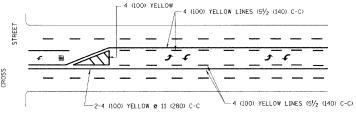




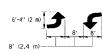


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1,2 m) WIDE

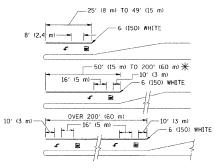


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

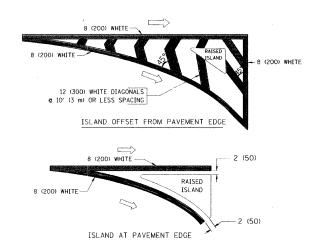


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) MLY AREA = 20.8 SO. FT. (1.9 m²)

* 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 TURN LANE MARKING



TYPICAL ISLAND MARKING

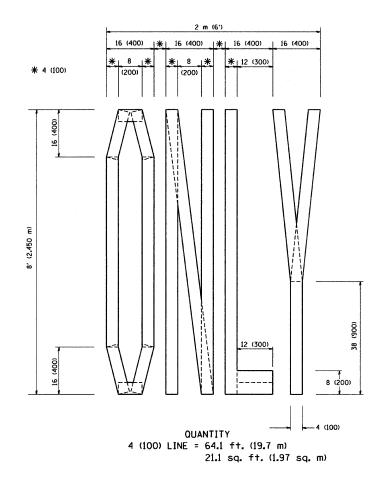
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	55/2 (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; 51/2 (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' (500) APART 2' (500) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE
	e 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	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 ml LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. 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) TO 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))
	1	L	1	

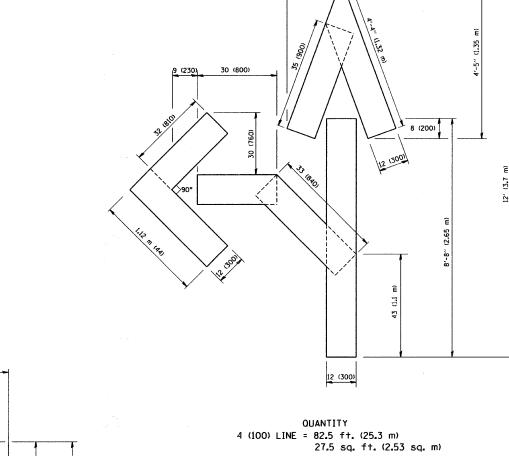
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

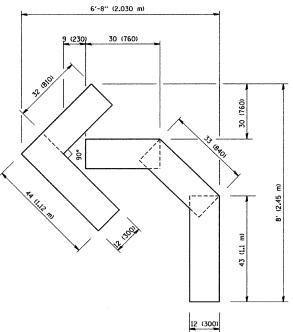
All dimensions are in inches (millimeters) unless atherwise shown.

ILE NAME =	USER NAME = drivakosgn	DESIGNED	~	EVERS	REVISED	-T. RAMMACHER	10-27-9
:\pw_work\pwidot\drivakosgn\dØ1Ø8315\tc	3.dgn	DRAWN			REVISED	-C. JUCIUS	09-09-0
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-		REVISED	-	
	PLOT DATE = 9/9/2009	DATE	-	03-19-90	REVISED	-	

	D	ISTRICT OF	VE		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TVDICAL D	AVEMENT	MARKINGS		2734	09-00150-00-RS	COOK	23	19
			MAIMINGS			TC-13	CONTRACT	NO.	63362
 SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. R	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		







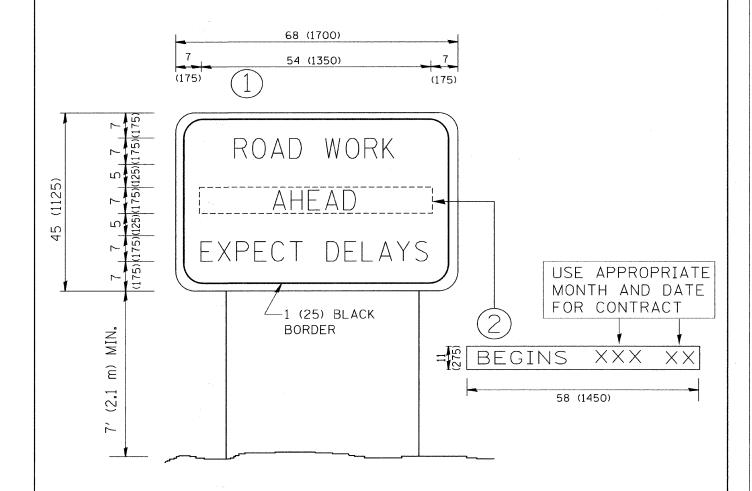
QUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

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

FILE NAME =	USER NAME = gaglianobt	DESIGNED ~	REVISED	-T. RAMMACHER 06-05-96
W:\diststd\22×34\tc16.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 1	RANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS	SECTION	COUNTY	SHEETS	NO.
FOR TRAFFIC STAGING	09-00150-00-RS	COOK	23	20
FOR INAPPIC STAGING	TC-16	CONTRACT	NO.63	362
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIS	IST. NO. 1 ILLINOIS FED. AI			



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.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -	R. MIRS 09-15-97				Δ	RTERIAL	POAD		F.A.	SECTION	COUNTY	TOTAL SI	HEET NO.
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED -	R. MIRS 12-11-97	STATE OF ILLINOIS							2734	09-00150-00-RS	COOK	23 2	1
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED ~	T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION			INI	FORMATI	ON SIGN		12151	TC22	CONTRACT	T NO. 63	562
	PLOT DATE = 1/4/2008	DATE -	REVISED -	C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO.	1 OF 1	SHEET	S STA.	TO STA.	FED. RO		ID PROJECT		

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) * * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS

BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

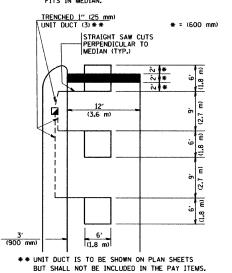
LEFT TURN LANES WITH MEDIANS

VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)
HANDHOLE LOCATION MAY

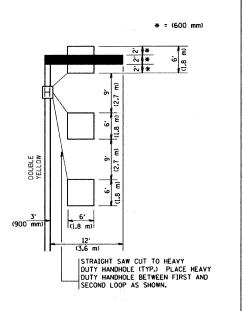
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD BI4001 TO ENSURE THAT HANDHOLE SITS IN MEDIAN.



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

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

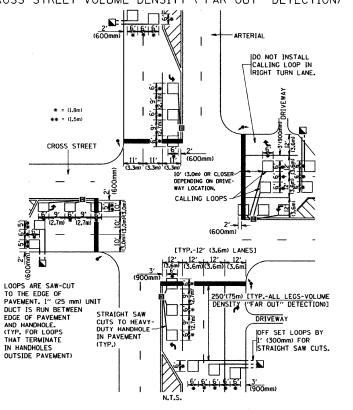
(PROTECTED / PERMITTED LEFT TURN PHASING)

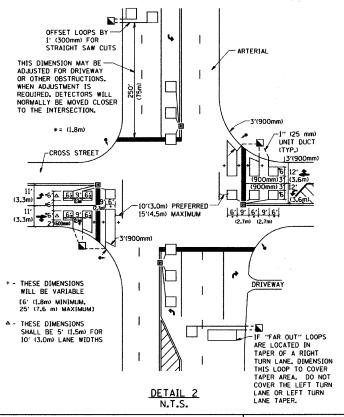


NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS 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.

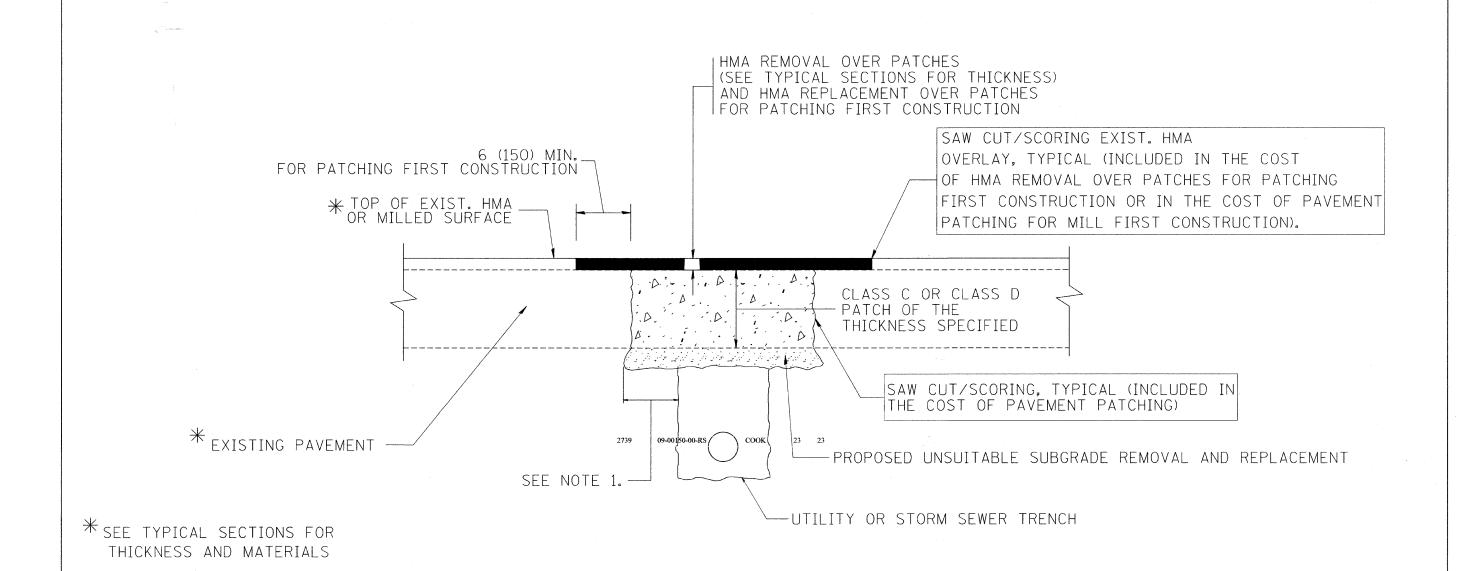
NOTE:

ALL DETAILS AND NOTES SHOWN ARE FROM THE 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:\diststd\22x34\tsØ7.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - R.K.F.	REVISED ~
	PLOT DATE = 1/4/2008	DATE -	REVISED -

	DISTRICT 1 - DE	TECTOR L	OOP INSTALLATI	ON	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DETAILS FOR ROADWAY RESURFACING					09-00150-00-RS	COOK	23	22
						TS-07	CONTRACT	NO. 63	5362
SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.	AID PROJECT		



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.

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A SECTION	COUNTY TOTAL SHEET
c:\projects\diststd22x34\	\bd22.dgn	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		2734 09-00150-00-RS	COOK 23 23
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 63362
	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.		ID PROJECT