\circ

 \circ

 \bigcirc

 \bigcirc

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

TRAFFIC DATA

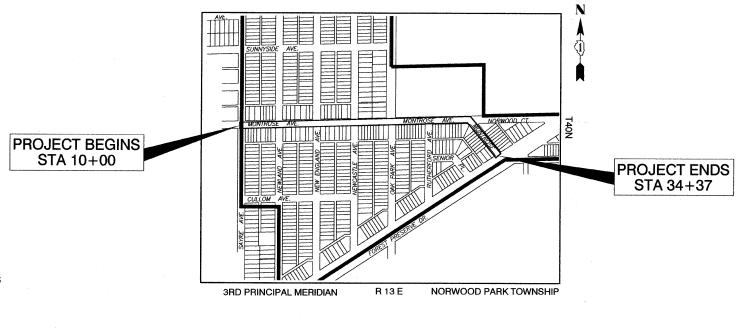
MONTROSE AVE. 2008 ADT = 20,300 2009 ADT = 20,500

DESIGN DESIGNATION

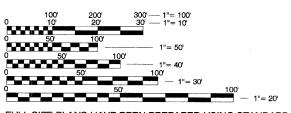
2,050 (29) ARTERIAL 0.75 (RS-20) DESIGN SPEED = 30 MPH POSTED SPEED = 30 MPH

F.A.U. 1366 (MONTROSE AVENUE) SAYRE AVE TO FOREST PRESERVE AVE LAPP RESURFACING SECTION: 09-00051-00-RS PROJECT: ARA-9003(500) VILLAGE OF HARWOOD HEIGHTS **COOK COUNTY**

C-91-107-10



PROJECT IS LOCATED IN THE VILLAGE OF HARWOOD HEIGHTS



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.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811



CONTRACT NO. 63429

LOCATION MAP

SCALE NOT TO SCALE

GROSS LENGTH = 2,437 FT. = 0.462 MILE NET LENGTH = 2,437 FT. = 0.462 MILE

DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PASSED DECEMBER 5 2009



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

APPROVED DECEMBER 1, 20 009

Showar Walte

VILLAGE OF HARWOOD HEIGHTS, DIRECTOR OF PUBLIC WORKS

DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

соок

PROFESSIONAL ENGINEER'S SIGN & SEAL

RELEASING FOR BID BASED ON LIMITED DECEMBER 8, 20 09

INDEX OF SHEETS

SHEET NUMBER TITLE COVER SHEET

- INDEX OF SHEETS, LISTING OF APPLICABLE HIGHWAY STANDARDS, GENERAL NOTES
- SUMMARY OF QUANTITIES AND TYPICAL SECTIONS
- 4 6
 - DISTRICT ONE STANDARD DETAILS BD08 FRAMES AND LIDS ADJUSTMENT WITH AND WITHOUT MILLING

 - BD32 BUTT JOINTS AND HMA TAPER
- TC10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS 10 TC13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- 11 TSO7 DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING
- 1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES AND THE PLANS SHALL BE INTERPRETED TO MEAN THE CURRENT EDITION OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- 2. ALL ITEMS WILL BE CONSTRUCTED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION AND SUPPLEMENT, EXCEPT AS MODIFIED TO CONFORM WITH VILLAGE OF HARWOOD HEIGHTS REQUIREMENTS.
- 3. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.
- 4. ONE (1) SET OF APPROVED PLANS MUST BE ON THE SITE AT ALL TIMES.
- 5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIEY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE/SHE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING WORK; OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD, SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTIONS PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT.
- 7. THE VILLAGE OF HARWOOD HEIGHTS PUBLIC WORKS DEPARTMENT, 708-867-7206, MUST BE NOTIFIED TWENTY-FOUR (24) HOURS IN ADVANCE FOR INSPECTIONS. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 AND THE VILLAGE OF HARWOOD HEIGHTS AT FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- 8. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE OR VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT OR
- 9. SAW CUTTING OF PAVEMENTS, ETC. SHALL BE TO THE DEPTH REQUIRED FOR REMOVAL SPECIFIED AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM REMOVED.
- 10. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION AND/OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS/HER AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- 11. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE.

LIST OF APPLICABLE STATE STANDARDS

LIVI VI ALLE.	TOADEL STATE STANDANDS
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS
701602-04	

GENERAL NOTES

- 12. HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINTS WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE BUTT JOINT AND HOT-MIX ASPHALT TAPER DETAILS SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED. THIS ITEM WILL BE PAID FOR FOLLOWING THE CONTRACT UNIT PRICE FOR BUTT JOINTS.
- 13. PROVIDE FOR THE IMMEDIATE REMOVAL OF ANY MUD AND DEBRIS THAT IS DEPOSITED INTO THE STREETS AND SIDEWALKS, WHICH WERE CAUSED BY THE CONSTRUCTION.
- 14. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE VILLAGE OF HARWOOD HEIGHTS. ALL TREE PROTECTION, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS WHICH WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- 15. IT WILL BE AT THE ENGINEER'S DISCRETION TO ADD AND/OR REMOVE QUANTITIES AS NECESSARY, ADDITIONAL QUANTITIES WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE ITEMS. THERE WILL BE NO ADDITIONAL COMPENSATION FOR QUANTITIES REMOVED BY DIRECTION FROM THE ENGINEER.

STORM SEWERS, WATER MAINS, AND UTILITIES

- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT, THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
- 17. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THE EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS, ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.
- 19, ALL UTILITIES, SCHOOL DISTRICTS, LOCAL POLICE, AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR 72 HOURS PRIOR TO THE START OF CONSTRUCTION.

- 20. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.
- 21. THE CONTRACTOR SHALL ENSURE THAT ALL WATER SYSTEM VALVES, VALVE VAULTS, AND SANITARY SEWER MANHOLES REMAIN READILY ACCESSIBLE TO THE VILLAGE FOR EMERGENCY OPERATIONS. THE LOCATIONS OF ALL WATER AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
- 22. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

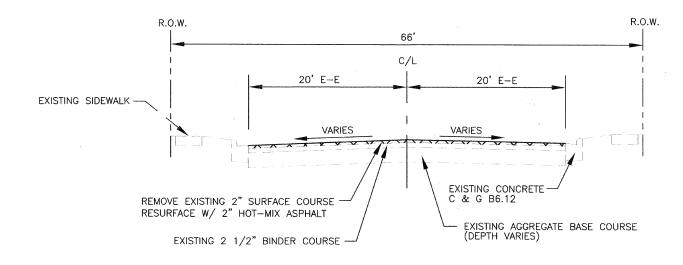
SIGNING AND STRIPING

- 23. SEE IDOT STANDARD DETAIL 780001, DISTRICT ONE DETAIL TC-13 AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.
- 24. THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH CONSTRUCTION OPERATIONS, ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

TRAFFIC CONTROL

25. SEE TRAFFIC CONTROL HIGHWAY STANDARDS CONCERNING TRAFFIC CONTROL AND PROTECTION.

FILE NAME =	USER NAME = \$USER\$	DESIGNED - CRG	REVISED -	OTATE OF WAINION	MONTROSE AVENUE	F.A.U. SECTION	COUNTY TOTAL SHEET NO.
P:\HO100075\MONTOSE AVE FED.DWG		DRAWN - RDB	REVISED -	STATE OF ILLINOIS	INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES	1366 09-00051-00-RS	COOK 11 2
	PLOT SCALE NONE	CHECKED - CRG	REVISED -	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 63429
1	PLOT DATE = 11/4/09	DATE - 11/4/09	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	ILLINOIS	FED, AID PROJECT



EXISTING AND PROPOSED TYPICAL SECTION STA 10+00 TO STA 34+37, MONTROSE AVE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

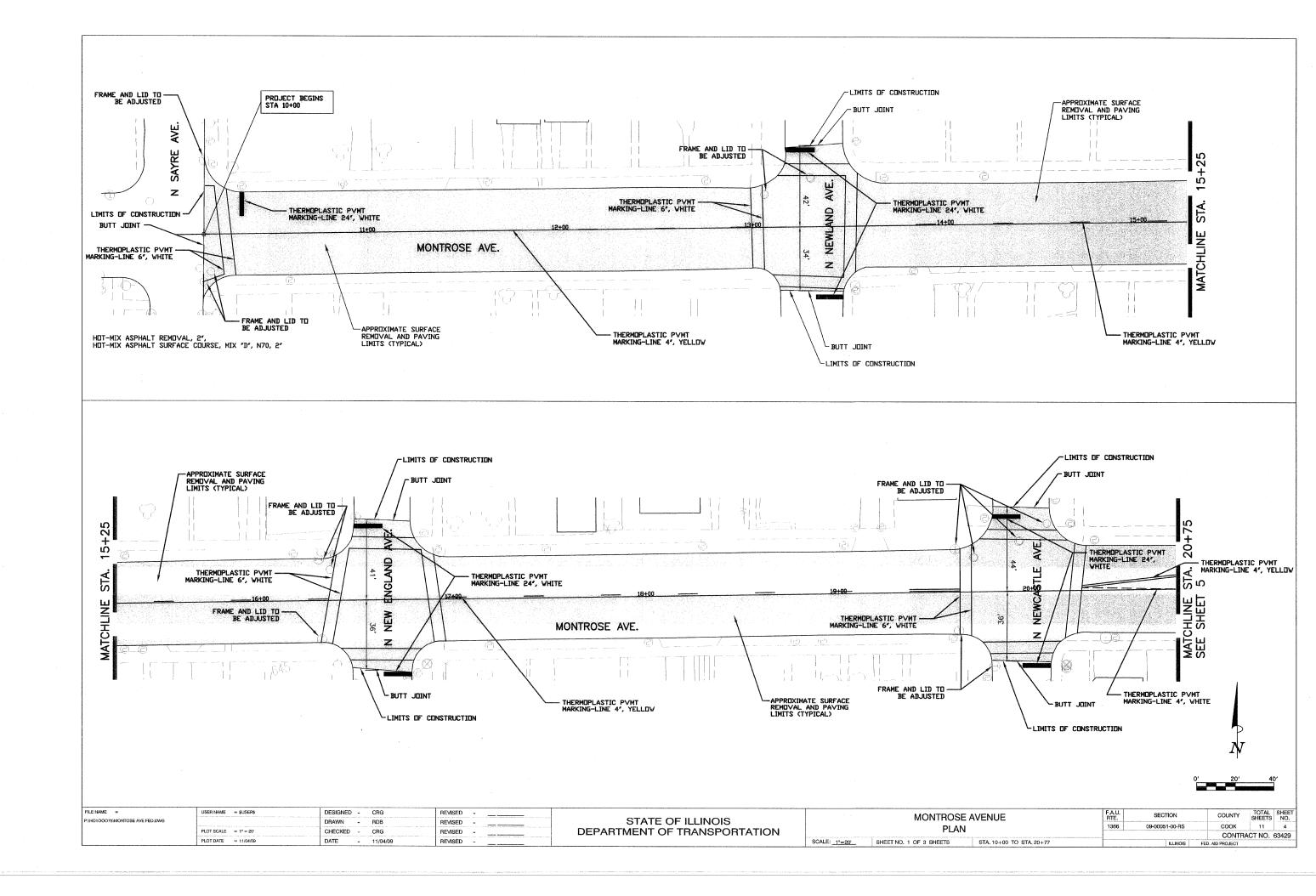
MIXTURE TYPE	AIR VOIDS @ Ndes
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, IL 9.5 MM, 2"	4%@ 70 GYR

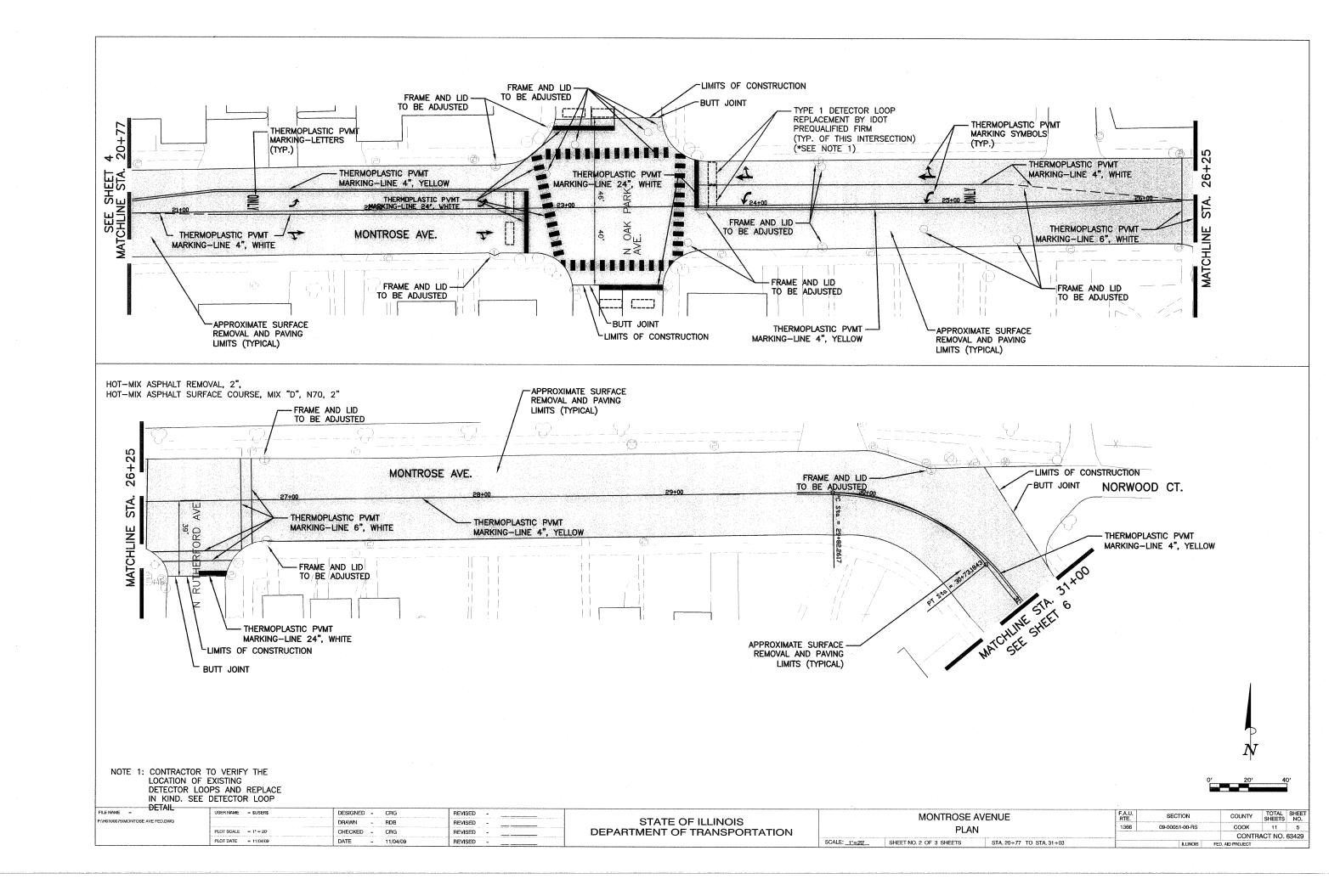
- * THE UNIT WEIGHT TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- * THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

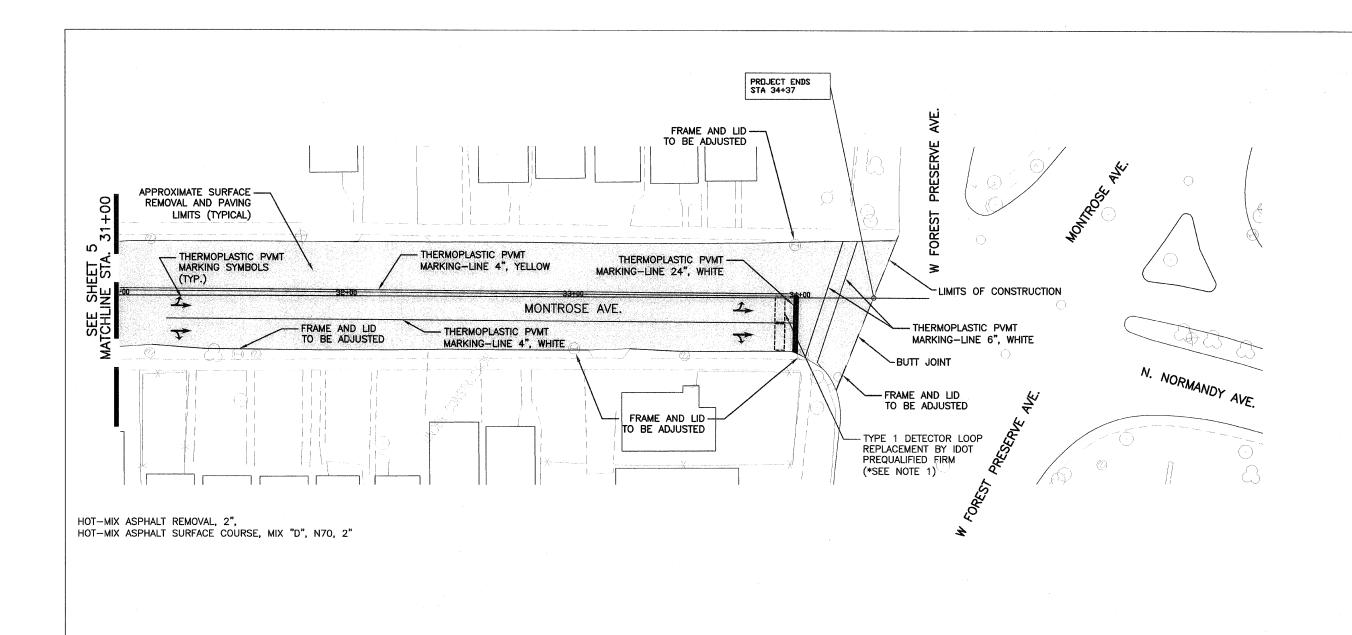
	SUMMARY OF QUANTITIES		· · · · · · · · · · · · · · · · · · ·	
Item No.	Items	Unit	Quantity	Construction Code
40300100	Bituminous Materials (Prime Coat)	GALLON	1,287	(0001)
40600300	Aggregate (Prime Coat)	TON	26	(1000)
40603340	Hot-Mix Asphalt Surface Course, Mix "D", N70	TON	1,442	(1000)
44000157	Hot-Mix Asphalt Surface Removal, 2"	SQ YD	12,872	(1000)
60266600	Adjust Valve Boxes to be Adjusted	EACH	6	(1000)
60300305	Frames and Lids to be Adjusted	EACH	36	(1000)
67100100	Mobilization	L SUM	1	(0001)
70102620	Traffic Control and Protection, Standard 701501	L SUM	1	(1000)
70102632	Traffic Control and Protection, Standard 701602	L SUM	1	(1000)
70102635	Traffic Control and Protection, Standard 701701	L SUM	1	(1000)
70102640	Traffic Control and Protection, Standard 701801	L SUM	1	(0001)
78000100 *	Thermoplastic Pavement Marking-Letters and Symbols	SQ FT	176	(1000)
78000200 _*	Thermoplastic Pavement Marking-Line 4"	FOOT	22,194	(1000)
78000400 _*	Thermoplastic Pavement Marking-Line 6"	FOOT	1,540	(1000)
78000650 _★	Thermoplastic Pavement Marking-Line 24"	FOOT	490	(1000)
88600600 _*	Detector Loop Replacement	FOOT	319	(1000)
Z0007900	Butt Joints	EACH	12	(1000)

*Specialty Items

FILE NAME =	USER NAME = \$USER\$	DEGIGITED -	CRG	REVISED -	Name and the same	OTATE OF HANGIO	MONTROSE AVENUE	F.A.U.	SECTION	COUNTY	TOTAL	SHEET
P:\H0100075\MONTOSE AVE FED.DWG	PLOT SCALE = NONE		RDB CRG	REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES AND TYPICAL SECTIONS	1366	09-00051-00-RS	соок	11	3
	PLOT DATE = 11/04/09	DATE -	11/04/09	REVISED -			SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ILLINOIS	FED, AID PROJECT	RACT NO. 6	3429



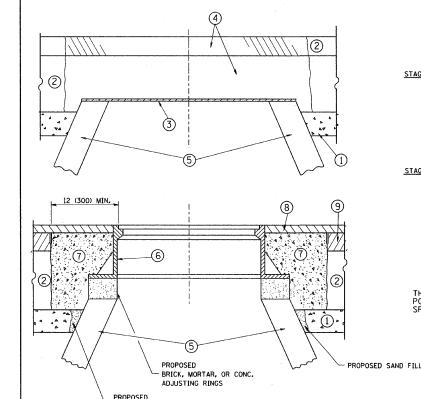




NOTE 1: CONTRACTOR TO VERIFY THE LOCATION OF EXISTING DETECTOR LOOPS AND REPLACE IN KIND. SEE DETECTOR LOOP DETAIL

MONTROSE AVENUE
PLAN
SHEET NO. 3 OF 3 SHEETS STA. 31+03 TO STA. 34+37

0′ 20′ 40′



SUB-BASE GRANULAR MATERIAL

6 FRAME AND LID (SEE NOTES)

2 EXISTING PAVEMENT

CLASS SI CONCRETE, HMA SURFACE COURSE OR HMA BINDER COURSE

PROPOSED CRUSHED STONE AND HMA SURFACE MIX

8 PROPOSED HMA SURFACE COURSE

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.

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

FILE NAME = COUNTY TOTAL SHEET NO. DESIGNED R. SHAH REVISED - R. SHAH 03-10-95 SECTION DETAILS FOR REVISED - A. ABBAS 03-21-97 STATE OF ILLINOIS :\diststd\22x34\bd08.dgn 09-00051-00-RS 136 FRAMES AND LIDS ADJUSTMENT WITH MILLING PLOT SCALE = 50.0000 '/ IN. CHECKED REVISED - R. WIEDEMAN 05-14-04 **DEPARTMENT OF TRANSPORTATION** BD600-03 (BD-8) CONTRA CONTRACT NO. 63429 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.

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.

SAND FILL

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.

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.

CONSTRUCTION PROCEDURES

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.

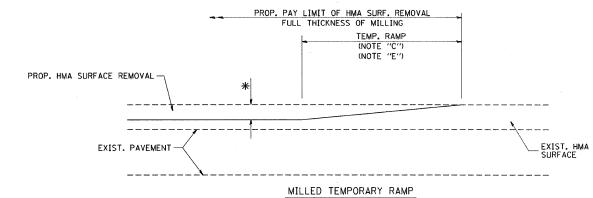
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS SI CONCRETE, OR HMA SURFACE COURSE OR HMA BINDER COURSE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

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

3 36 (900) DIAMETER METAL PLATE

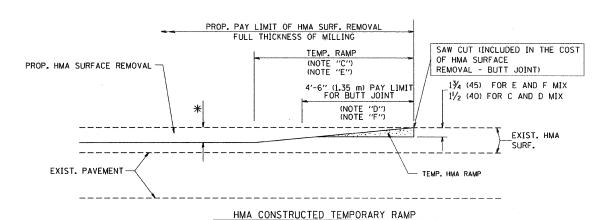
5 EXISTING STRUCTURE

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



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

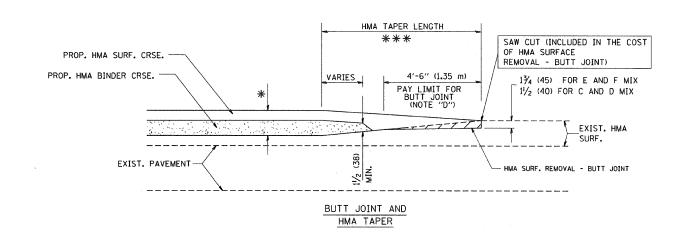
OPTION 1



OPTION 2

TYPICAL TEMPORARY RAMP

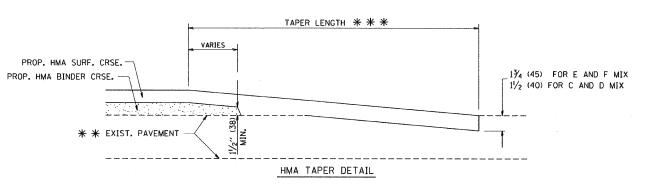
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

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 1/2 (40) FOR C AND D MIX * * EXIST. PAVEMENT BUTT JOINT DETAIL

PROP. HMA OR PCC
SURFACE REMOVAL - BUTT JOINT
30'-0" (9.0 m) (NOTE "A")



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

EXIST. HMA OR PCC SURFACE

- 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")

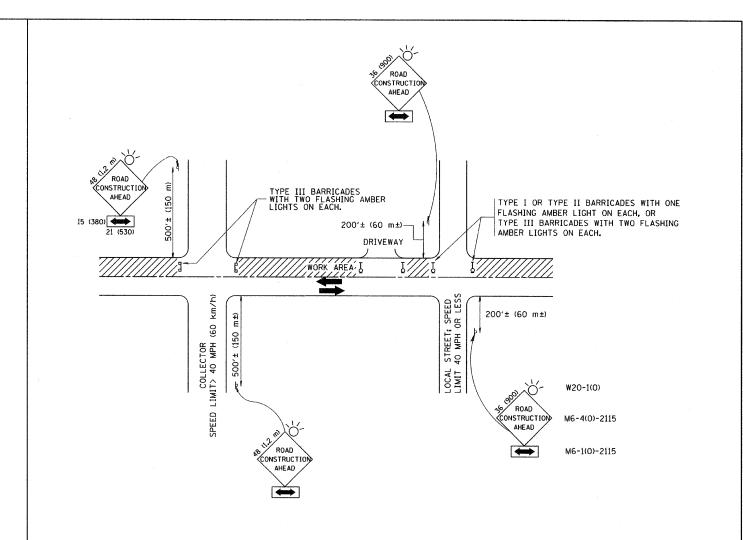
BASIS OF PAYMENT:

- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER 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.

SAW CUT (INCLUDED IN THE COST

FILE NAME =	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94				F.A.U. SECTION	COUNTY TOTAL SHEET
W:\d:ststd\22x34\bd32.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		BUTT JOINT AND	1366 00.00051-00.PS	SHEETS INU.
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01	DEPARTMENT OF TRANSPORTATION		HMA TAPER DETAILS	BD400-05 BD32	COOK 11 8 CONTRACT NO. 63429
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AI	
		,						



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 × 36 (900×900) 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.
- 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 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).

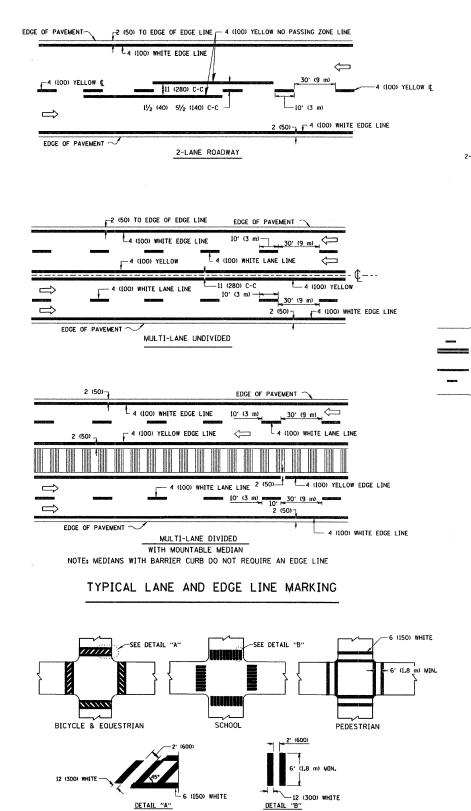
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL 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

STATE	OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	1366	09-00051-00-RS	COOK	. 11	9
		TC-10	CONTRACT	NO.	63429
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED BC	AD DIST NO 1 THE INDIS SED A	IN PROJECT		



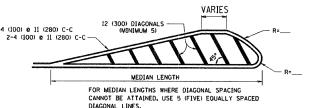
2-4 (100) YELLOW e 11 (280) C-C

NO DIAGONALS

4' (1,2 m) OUTSIDE TO OUTSIDE OF LINES

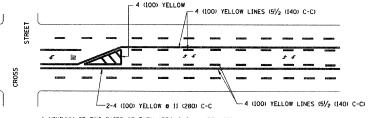
2-4 (100) YELLOW e 11 (280) C-C

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) T0 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

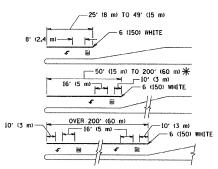


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

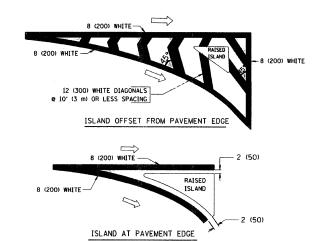
TYPICAL PAINTED MEDIAN MARKING



* 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 UNDIVEDED PAVEMENT	2 e 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	5½ (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 & EGUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (I.8 m) APART 2' (600) APART 2' (600) APART 5EE 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	II (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 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) e 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))

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:\distatd\22x34\tc13.dgn		DRAWN -	REVISED -A. HOUSEH 10-09-96
	PLOT SCALE = 50.000 ' / [N.	CHECKED -	REVISED -A. HOUSEH 10-17-96
	PLOT DATE = 1/4/2008	DATE - 03-19-90	REVISED -T. RAMMACHER 01-06-00

TYPICAL CROSSWALK MARKING

STATI	E OI	F ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	DISTRICT ONE TYPICAL PAVEMENT MARKINGS						SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
							09-00051-00-RS	COOK	11	10		
l							TC-13	CONTRACT	NO.	63429		
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. IPAVED OF NON-PAVED SHOULDER (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT (3.0 m)(3.0 m) * = (600 mm) * * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

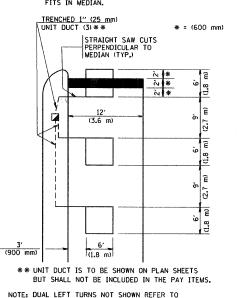
PLOT DATE = 1/4/2008

FILE NAME =

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

(PROTECTED / PERMITTED LEFT TURN PHASING)

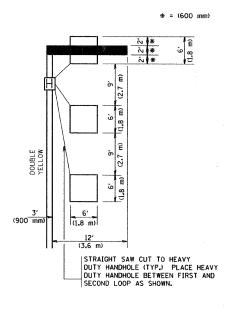
HANDHOLE LOCATION MAY
VARY DEPENDING ON GEOMETRICS
AND DESIGN OF TRAFFIC SIGNALS.
HEAVY-DUTY HANDHOLES TO BE
USED WHEN THE MEDIAN IS
MOUNTABLE. REFER TO STANDARD
BI4001 TO ENSURE THAT HANDHOLE



PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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

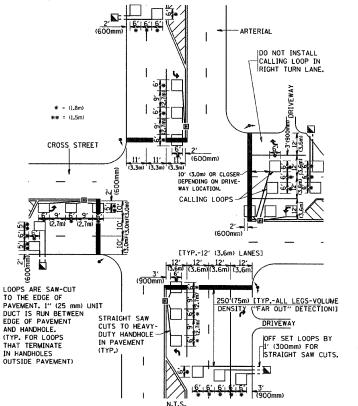
(PROTECTED / PERMITTED LEFT TURN PHASING)



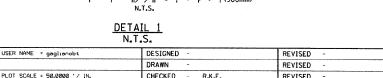
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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)



DATE



REVISED

OFFSET LOOPS BY-STRAIGHT SAW CUTS ARTERIA THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. * = (1.8m) / UNIT DUCT |3'(900mm J•6 △ 6: 9: 6: -10'(3,0m) PREFERRED -15'(4.5m) MAXIMUM | e | a | e | a | e | + - THESE DIMENSIONS DRIVEWAY WILL BE VARIABLE F6' (1.8m) MINIMUM △ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS 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. SHIELDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- * 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 $\underline{\mathsf{ALL}}$ DETECTOR LOOPS SHALL BE SIX FEET
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND FACH 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.

STATE OF ILLINOIS	DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING					F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
DEPARTMENT OF TRANSPORTATION						1366	09-00051-00-RS	COOK	11	11	
DEFARINCENT OF TRANSPORTATION	SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	STA.	TO STA.	TS-07 CONTRACT			NO.	63429