FOR INDEX OF SHEETS, SEE SHEET NO. 2 FOR LIST OF HIGHWAY STANDARDS SEE SHEET NO. 2 STATE OF ILLINOIS 07-29-2016 LETTING ITEM 013 H61 FED. RO
DEPARTMENT OF TRANSPORTATION

HIGHWAY CLASSIFICATION
MAPLE AVENUE – MINOR COLLECTOR

TRAFFIC DATA
MAPLE AVENUE
2015 ADT = 8,500

POSTED SPEED LIMIT
MAPLE AVENUE = 25 MPH

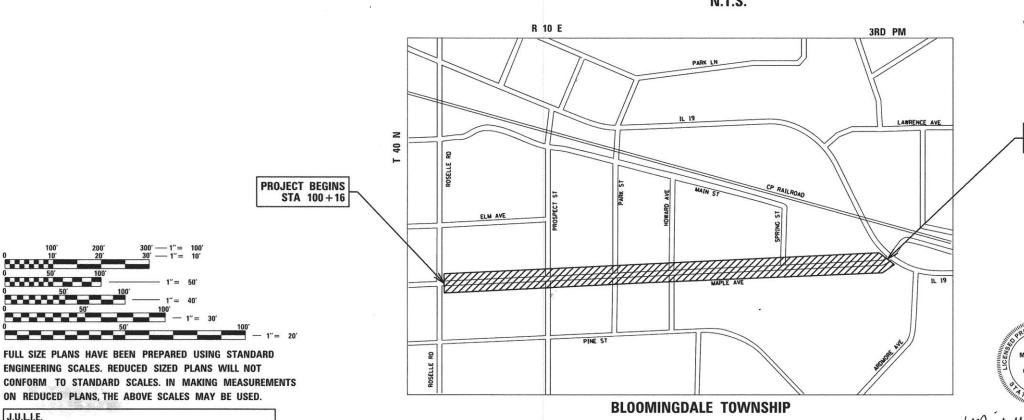
DESIGN SPEED LIMIT
MAPLE AVENUE = 25 MPH

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 1461 (MAPLE AVENUE)
FAU 364 (ROSELLE ROAD) TO FAU 1321 (IRVING PARK ROAD)
RESURFACING

SECTION: 16-00059-00-RS
PROJECT NO.: M-4003(746)
VILLAGE OF ROSELLE
DUPAGE COUNTY

C-91-289-16
PROJECT LOCATION MAP
VILLAGE OF ROSELLE
N.T.S.



PROJECT LENGTH

NET AND GROSS LENGTH OF PROJECT = 2,940 FT. = 0.556 MILE

CONTRACT NO. 61C92

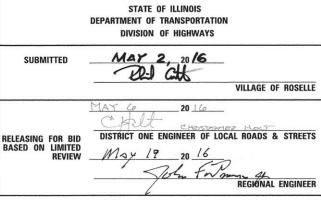
**DESIGN ENGINEER: M. ZUZZIO** 

PROJECT MANAGER: A. CHAUDHRY

1-800-892-0123 OR 811

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION





PROJECT ENDS STA 129 + 56

MICHELLE L. ZUZZIO. PAE



420 NORTH FRONT STREET, SUITE 100 | McHENRY, ILLINOIS 60050
Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com
ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

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847-705-4406 SCHAUMBURG, F. RIDDLE, **ENGINEER: CHARLES** 

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#### **INDEX OF SHEETS**

1	COVER SHEET
2	INDEX OF SHEETS, STATE STANDARDS, AND DISTRICT ONE DETAILS
3	GENERAL NOTES
4	SUMMARY OF QUANTITIES
5	TYPICAL SECTIONS
6	RESURFACING PLAN
7-8	INTERSECTION PLAN
9	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15'(4.5m) (BD-O1)
10	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING (BD-08)
11	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT (BD-22)
12	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24)
13	BUTT JOINT AND HMA TAPER DETAILS (BD-32)
14	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
15	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
16	PAVEMENT MARKING LETTERS ANS SYMBOLS FOR TRAFFIC STAGING (TC-16)
17	ARTERIAL ROAD INFORMATION SIGN (TC-22)
18	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05, SHEET 2 OF 7)
19	DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING (TS-07)

#### STATE STANDARDS

LIST OF DESCRIPTION
STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
PAVEMENT JOINTS
PERPENDICULAR CURB RAMPS FOR SIDEWALKS
DEPRESSED CORNER FOR SIDEWALKS
ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
CLASS C AND D PATCHES
CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
URBAN LANE CLOSURE, MULTILANE INTERSECTION
SIDEWALK, CORNER OR CROSSWALK CLOSURE
TRAFFIC CONTROL DEVICES
TYPICAL PAVEMENT MARKINGS

#### **DISTRICT ONE DETAILS**

	5m)
BD-01 DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. & FACE OF CURB & EDGE OF SHOULDER >= 15'(4.5	
BD-08 DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING	
BD-22 PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	
BD-24 CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	
BD-32 BUTT JOINT AND HMA TAPER DETAILS	
TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS	
TC-16 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING	
TC-22 ARTERIAL ROAD INFORMATION SIGN	
TS-05 (SHEET 2 OF 7) DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	
TS-07 DISTRICT ONE - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING	

INDEX	OF SHEETS.	STATE	STANDAR	DS. DISTRICT	ONE DETAILS	F.A.U. RTE.	SE	CTION	COUNTY	TOTAL	SHEET NO.
	,	AND		[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]		1461	16-000	59-00-RS	DUPAGE	19	2
		AND	GENETIAL	MOTES		V 170 - 170			CONTRACT	NO.	61C92
SCALE: N.T.S.	SHEET NO.	1 OF	2 SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO.	ILLINOIS FED.	AID PROJECT		

#### GENERAL NOTES

- ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, APRIL 2016. ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY 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 ANY PART OF 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 ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE. BE FINAL AND CONCLUSIVE.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT 8-1-1 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- 4. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY BASELINE AS SHOWN ON PLAN.
- SAW CUTTING OF PAVEMENTS, CURB AND GUTTER, SIDEWALK, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE ITEM REMOVED.
- CONTRACTS SUCH AS PAVEMENT GRINDING OR PATCHING WHICH RESULT IN THE DESTRUCTION OF TRAFFIC SIGNAL DETECTION REQUIRE A NOTIFICATION OF INTENT TO WORK AND AN INSPECTION. A MINIMUM OF SEVEN (7) WORKING DAYS PRIOR TO THE DETECTION REMOVAL, THE CONTRACTOR SHALL
- -IL 19 TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER AT (847) 705-4424
  -IDOT ELECTRICAL MAINTENANCE CONTRACTOR AT (773) 287-7600
  -ROSELLE ROAD DUPAGE COUNTY BOB GREENE AT 630-407-6900
  AT WHICH TIME ARRANGEMENTS WILL BE MADE TO ADJUST THE TRAFFIC CONTROLLER TIMING TO COMPENSATE FOR THE ABSENCE OF DETECTION.
- 7. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO CURB MARKINGS. WATER AND SANITARY SERVICE LOCATIONS HAVE BEEN MARKED WITH 'W' AND 'S' SYMBOLS THROUGHOUT THE PROJECT LIMITS. THESE MARKINGS MUST BE LOCATED BY THE CONTRACTOR AND REPLACED DURING FINISHING OF THE CONCRETE WORK. THIS WORK WILL BE INCLUDED IN THE COST OF THE CONCRETE CURB BEING
- 8. MATERIALS RESULTING FROM THE REMOVAL OF ASPHALT SURFACES, CONCRETE REMOVAL, UTILITY STRUCTURE ADJUSTMENTS, GRADING WORK, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGEMENT OF THE ENGINEER, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE ENGINEER WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR SHALL HAVE THE DOLLAR AMOUNT REDUCED FROM THE NEXT PAY ESTIMATE.
- 9. SIDEWALK REMOVAL AND REPLACEMENT AND COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AS SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATIONS AND QUANTITIES TO BE DETERMINED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 10. DURING PATCHING OPERATIONS IF IT IS DETERMINED THAT LESS THAN 4" OF AGGREGATE SUBBASE EXISTS, THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 4" OF SUBBASE GRANULAR MATERIAL TO THE AREA PRIOR TO THE PLACEMENT OF THE ASPHALT PATCH. THIS WORK WILL NOT BE PAID FOR SEPARATELY AND SHALL BE INCLUDED IN THE BID PRICE FOR "SUBBASE GRANULAR MATERIAL, TYPE BA".

#### GENERAL NOTES (CONT.)

- STORM SEWERS, WATER MAINS, AND UTILITIES
  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.
- 12. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR 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.
- 13. 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 CONTRACTORS EXPENSE. CONTRACTOR'S EXPENSE.
- 14. THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.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.
- 15. THE INDISCRIMINATE USE OF FIRE HYDRANTS OR EXISTING STREAMS, CREEKS, WETLANDS OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISIDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE ENGINEER PRIOR TO USE OF THE WATER.

SIGNING AND STRIPING

16. SEE IDOT DISTRICT ONE DETAILS AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.

SCALE: N.T.S.

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				ROADWAY
PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	0005
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	80	80.0
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	172	172
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3.2	3.2
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	3.2	3.2
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3.2	3.2
25200110	SODDING, SALT TOLERANT	SQ YD	172	172
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	700	700
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	7,859	7,859
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	17	17
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	690	690
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	200	200
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1,380	1,380
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	52	52
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	2,101	2,101
42400800	DETECTABLE WARNINGS	SQ FT	325	325
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	11,992	11,992
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	164	164
44000600	SIDEWALK REMOVAL	SQ FT	2,002	2,002
44201725	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	117	117
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	117	117
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	233	233
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	233	233
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2
60300305	FRAMES AND LIDS TO BE ADJUSTED	EACH	5	5
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	5	5
67100100	MOBILIZATION	LSUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1
70102635			1	
	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM		1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	3,103	3,103
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1,501	1,501
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	394	394
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,403	4,403
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,907	1,907
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1,645	1,645
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	82	82
88600600	DETECTOR LOOP REPLACEMENT	FOOT	415	415
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	5	5
X6030205	FRAMES AND GRATES TO BE ADJUSTED (SPECIAL)	EACH	5	5
Z0004530	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 8"	SQ YD	112	112
Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	874	874
	TEMPORARY INFORMATION SIGNING	SQ FT	51	51

SPECIAL PROVISION SPECIALTY ITEMS

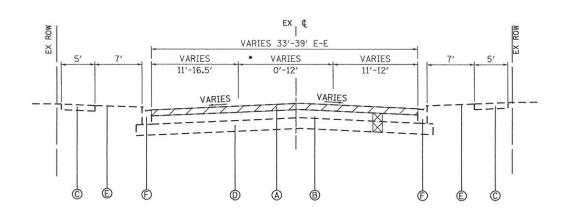
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STATI	E OF	ILLINOIS
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	SUMMA	RY OF QU	ANTITIES		RTE.	SEC	TION	COUNTY	SHEETS	NO.
					1461	16-000	59-00-RS	DUPAGE	19	4
								CONTRACT	NO.	61C9
SCALE: N.T.S.	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED. RO.	AD DIST. NO.	ILLINOIS FED.	AID PROJECT		



# VARIES 33'-39' E-E 5' 7' VARIES VARIES VARIES 7' 5' 11'-16.5' 0'-12' 11'-12' 2% 2% 2% © © © © ® 1) © 3 ② 3 © © ©

EX C

#### **EXISTING TYPICAL SECTION**

MAPLE AVENUE STA 100+16 TO 129+56

SECTION BETWEEN HOWARD AVE AND IRVING PARK ROAD - NO TURNLANE; PARKING STALLS ON NORTH SIDE

DENOTES AREA OF HOT-MIX ASPHALT SURFACE REMOVAL



#### **EXISTING LEGEND**

- A HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"
- B HOT-MIX ASPHALT PAVEMENT, (10")
- © PORTLAND CEMENT CONCRETE SIDEWALK (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)
- ① AGGREGATE SUBBASE, (4")
- E EXISTING GROUND
- © COMBINATION CONCRETE CURB & GUTTER, VARIES (SPOT REMOVAL & REPLACEMENT AS DIRECTED BY THE ENGINEER)

#### PROPOSED LEGEND

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50; 2"
- ② POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50; 1"
- 3 BITUMINOUS MATERIALS (TACK COAT)

NOTE: THE PATCHING QUANTITIES HAVE BEEN ESTIMATED BASED ON FIELD OBSERVATION DURING DESIGN. ACTUAL QUANTITIES TO BE DETERMINED DURING CONSTRUCTION BY THE ENGINEER.

THE PAVEMENT SHALL BE MILLED PRIOR TO PATCHING

SCALE: N.T.S.

#### PROPOSED TYPICAL SECTION

MAPLE AVENUE STA 100+16 TO 129+56

HOT-MIX ASPHALT MIXTURE REQUIREMENTS					
MIXTURE TYPE	AIR VOIDS @ Ndes				
PAVEMENT RESURFACING					
HMA SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 2"	4.0% @ 50 GYR.				
POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50; 1"	3.5% @ 50 GYR.				
DRIVEWAYS					
HMA SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 2"	4.0% € 50 GYR.				
HMA BASE COURSE (HMA BINDER IL-19mm); PE-6", CE-8"	4.0% € 50 GYR.				
PATCHING (see note)					
CLASS D PATCHES, (HMA BINDER, IL-19mm)	4.0% @ 70 GYR.				

#### NOTES:

- 1. THE UNIT WEIGHT 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.
- 3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

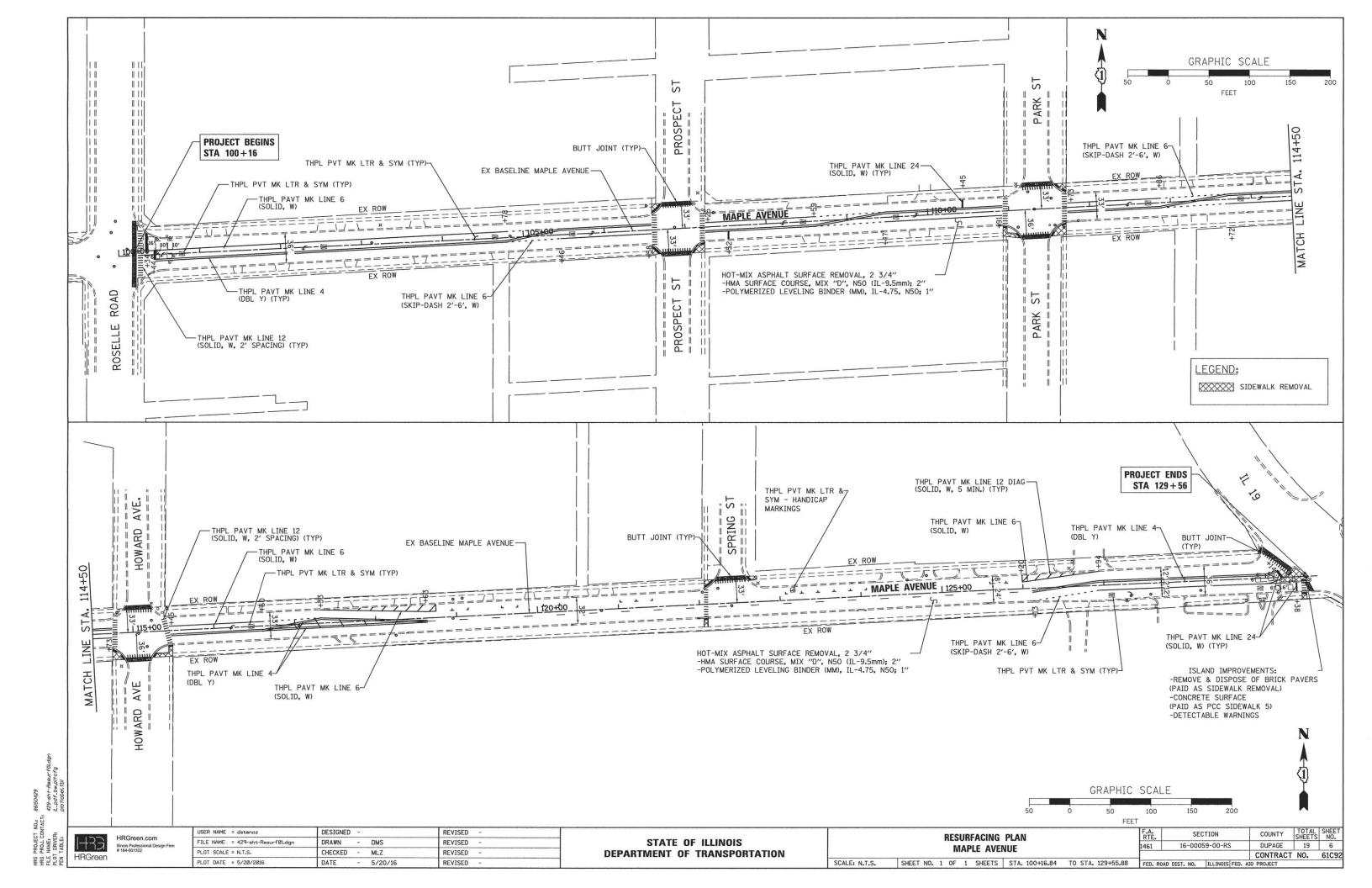
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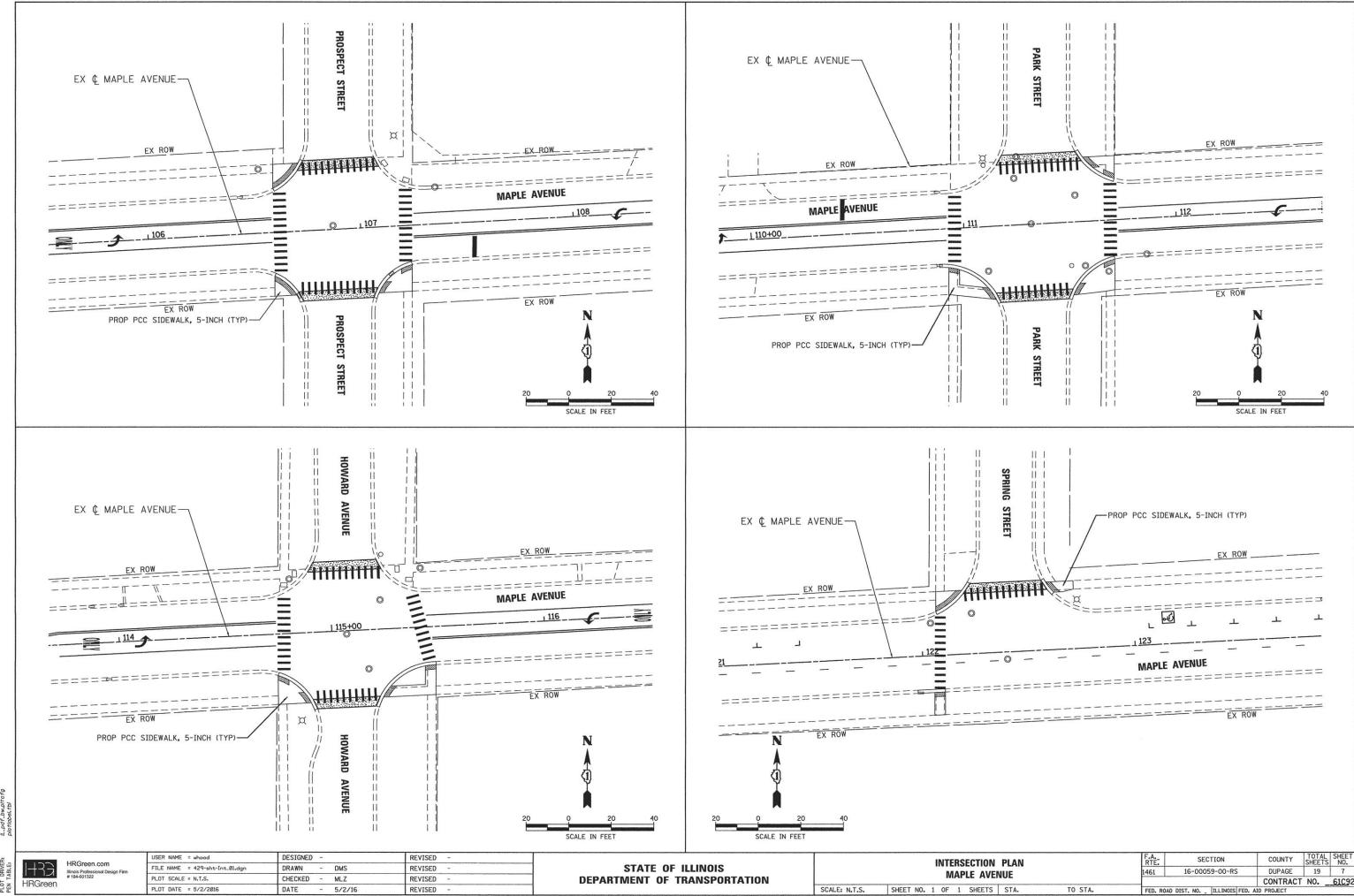
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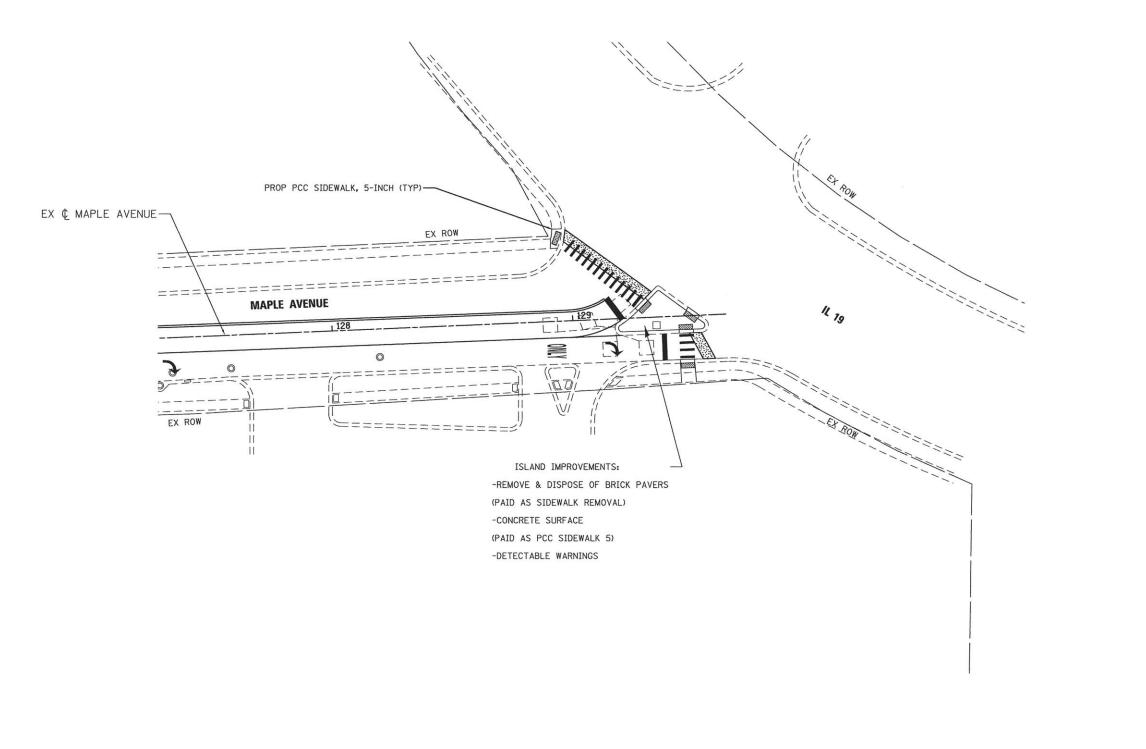
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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		MAPLE AVE TYPICAL SEC			1461	16-000	59-00
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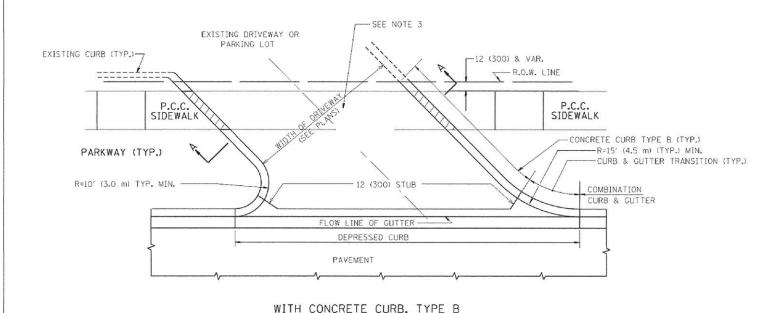
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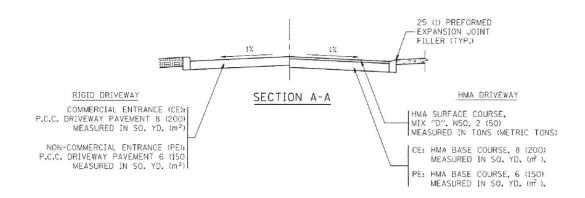
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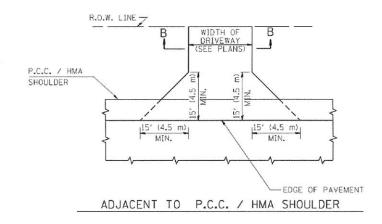
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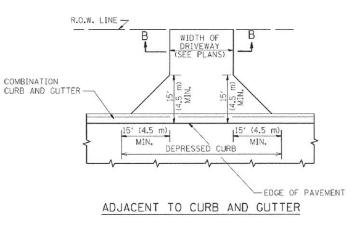
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IVI	AILL AVL	NOL				CONTRACT	NO.	61C
1 OF	1 SHEETS	STA.	TO STA.	FED. ROAD	DIST. NO.   ILLINOIS FED.	AID PROJECT		

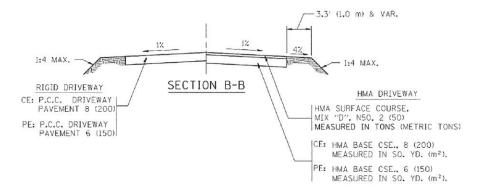
WITH CONCRETE CURB, TYPE B











RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B. 8 (200) MEASURED IN SQ. YD. (m<sup>2</sup>).

#### GENERAL NOTES:

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 REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK, DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

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 QUESTIONS 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.

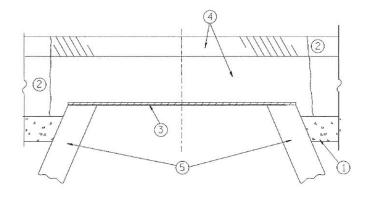
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

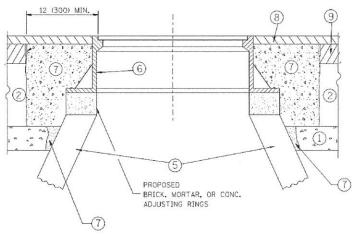
SCALE: NONE

FILE NAME =	USER NAME = legad	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
c:\pw_work\pwidot\leysa\d0108315\bd01.dgr		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 9/6/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATI	: OF	ILLINOIS
DEPARTMENT	<b>OF</b>	TRANSPORTATION

DR	RIVEWAY DETAILS – DISTANCE	BETWEEN R.O.W.	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
			1461	16-00059-00-RS	DUPAGE	19	9
AND	FACE OF CURB & EDGE OF SI	10ULDER > = 15 (4.5 m)	BI	00156-07 (BD-01)	CONTRACT	NO.	61C92
E	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED.	AID PROJECT		





#### 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 1TEM 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.

SCALE: NONE

#### 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 PP-I\* 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
- (8) PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX

  (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 MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE 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.

# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = USER NAME = bouerd1 DESIGNED - R. SHAH REVISED - R. WIEDEMAN 05-14-04

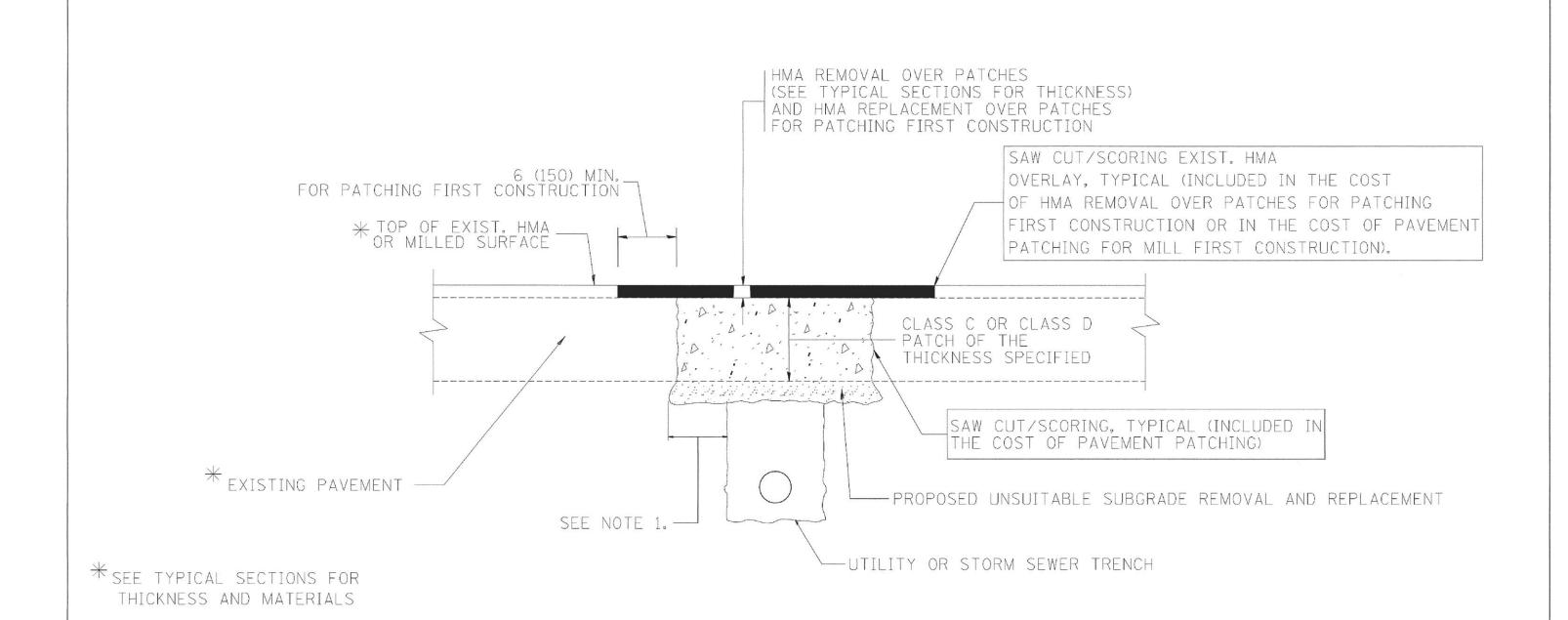
c1\pm\_work\pwidot\bauerd1\d0009315\bd08.8gn DRAWN - REVISED - R. BORO 01-01-C7

PLOT SCALE = 1968.5000 '/ m CHECKED - REVISED - R. BORO 03-09-11

PLOT DATE = 12/6/2011 DATE - 10-25-94 REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING
SHEET NO. 1 OF 1 SHEETS STA. TO



#### 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)

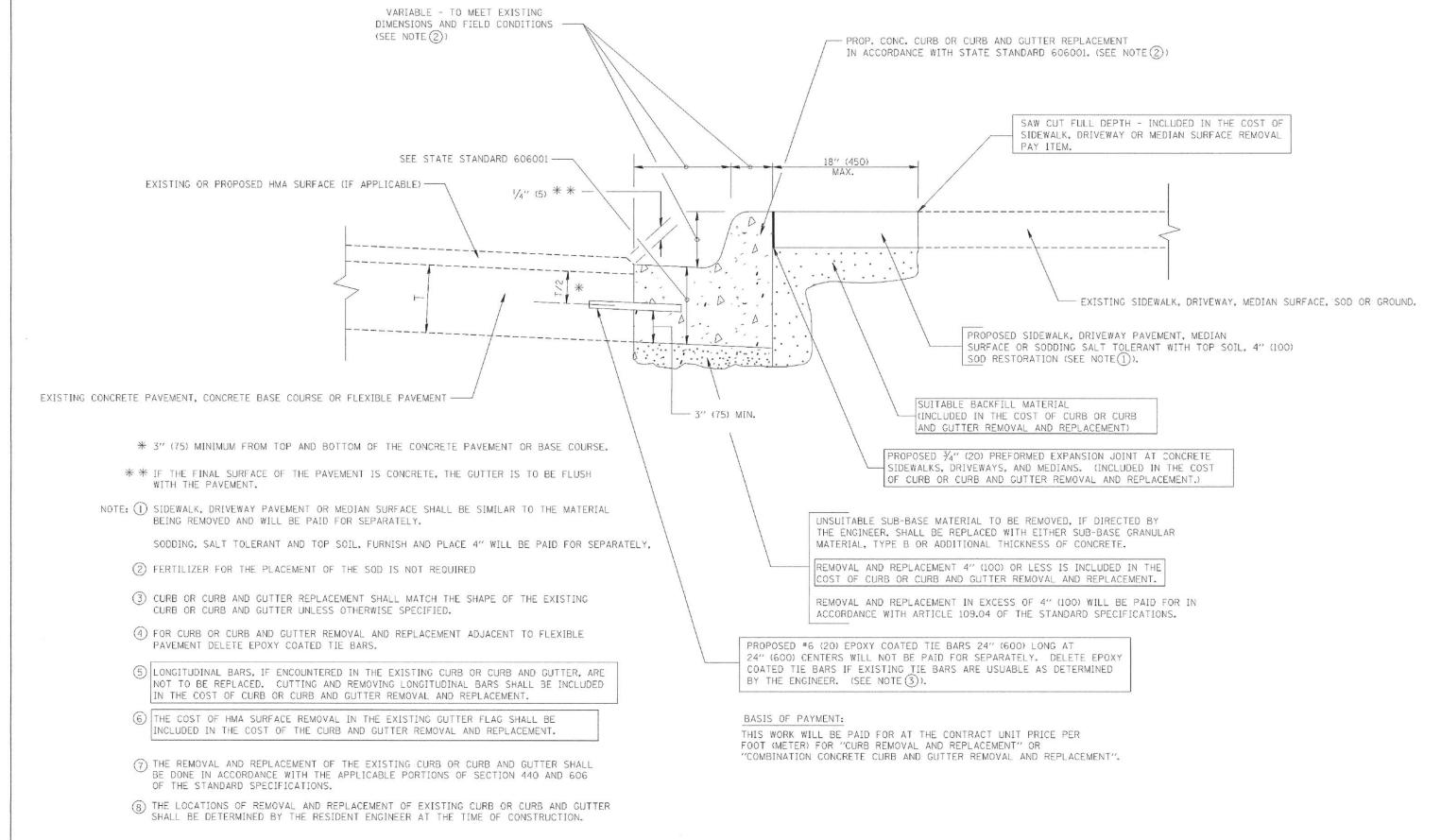
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### 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.

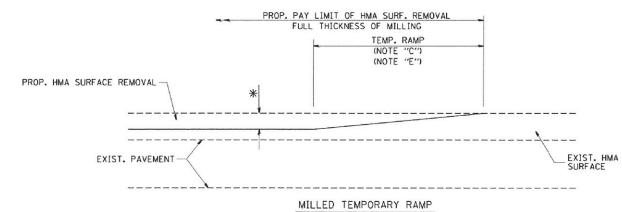
i	FILE NAME =	USER NAME = bouerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		- T	PAVEMENT PATCHING FOR	F.A.U.	SECTION	COUNTY	TOTAL	SHEET
ABLE	c:\projects\diststd22x34\bd22.dgn	DIGT COLUE - COMMON A MI	DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		HMA SURFACED PAVEMENT	1461	16-00059-00-RS	DUPAGE	19	11
2		PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION				BD400-04 (BD-22)	CONTRACT	f NO.	61C92
g		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.	FED. R	DAD DIST. NO. 1   ILLINOIS FED.	AID PROJECT		



## CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

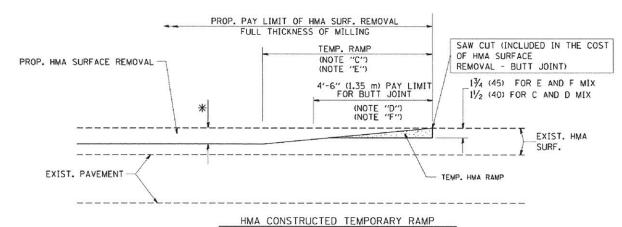
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = DESIGNED A. HOUSEH R. SHAH 10-03-96 COUNTY **CURB OR CURB AND GUTTER** STATE OF ILLINOIS DRAWN DUPAGE 16-00059-00-RS 19 REMOVAL AND REPLACEMENT CHECKED PLOT SCALE = 50.000 '/ IN. REVISED M. GOMEZ 01-22-01 **DEPARTMENT OF TRANSPORTATION** BD600-06 (BD-24) CONTRACT NO. DATE SHEET NO. 1 OF 1 SHEETS STA.



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

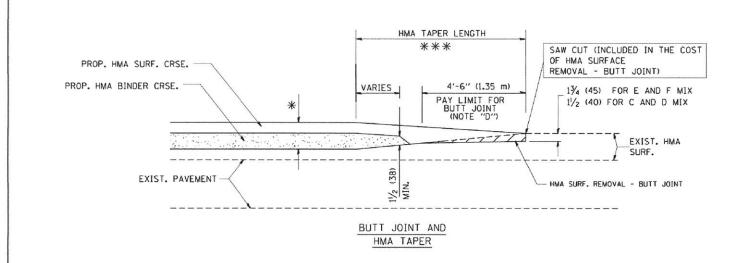
#### OPTION 1



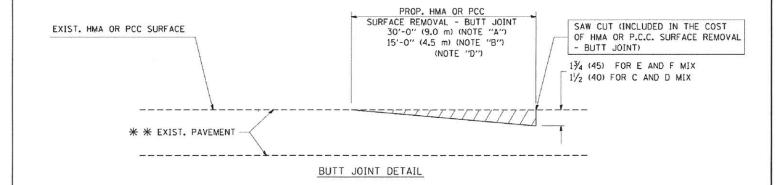
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

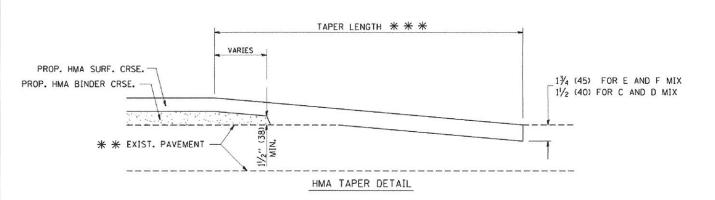
#### OPTION 2

#### 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".
- \* 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:

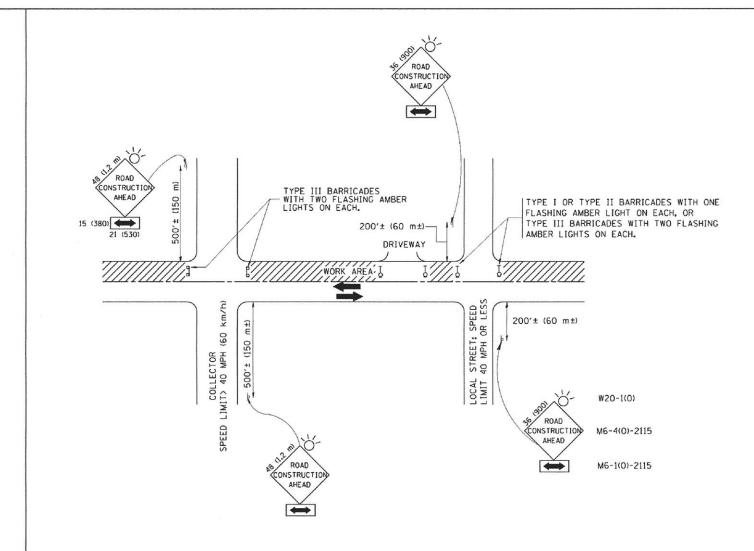
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER)
FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

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

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HRG HRG PLO PEN



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN 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 CREATER 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.

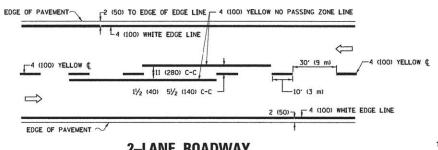
SCALE: NONE

 WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

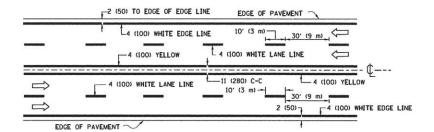
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL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

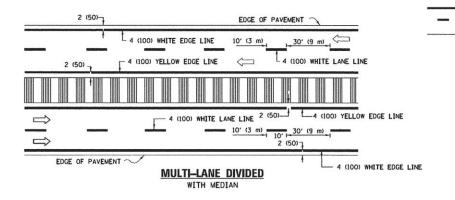
HRG HRG FLE PEN



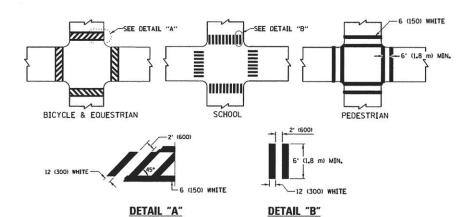
#### 2-LANE ROADWAY



#### **MULTI-LANE UNDIVIDED**



#### TYPICAL LANE AND EDGE LINE MARKING



#### TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

#### TWO-4 (100) YELLOW @ 11 (280) C-C-NO DIAGONALS OUTSIDE OF LINES -TWO-4 (100) YELLOW @ 11 (280) C-C

8 (200) WHITE-

12 (300) WHITE DIAGONALS

8 (200) WHITE-

ISLAND OFFSET FROM PAVEMENT EDGE

8 (200) WHITE ---

ISLAND AT PAVEMENT EDGE

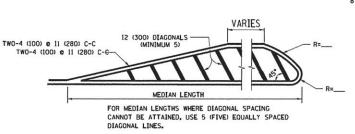
TYPICAL ISLAND MARKING

RAISED

ISLAND

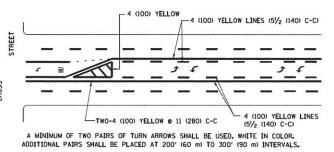
@ 10' (3 m) OR LESS SPACING

#### 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))

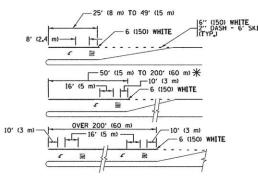
#### MEDIANS OVER 4' (1.2 m) WIDE





#### MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

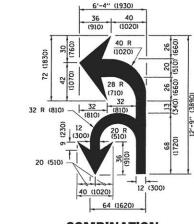


AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) (1.5 m<sup>2</sup> ) AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>)

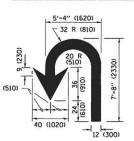
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

#### TYPICAL LEFT (OR RIGHT) TURN LANE

#### TYPICAL TURN LANE MARKING



#### COMBINATION LEFT AND U-TURN



U-TURN

# LANE REDUCTION TRANSITION

SPEED LIMIT

30

35

40

45

50

55

345

425

500

580

665

750

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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	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 MEDIANS IN YELLOW
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 8' (2,4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EOUESTRIAN) 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' (GOD) APART 2' (GOD) 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 OF1 "R"23,6 SQ, FT, (0.33 m²) EACH "X"254,0 SQ, FT, (5,0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8°)	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/ 150' (45 m) C-C (0VER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16,3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

SCALE: NONE

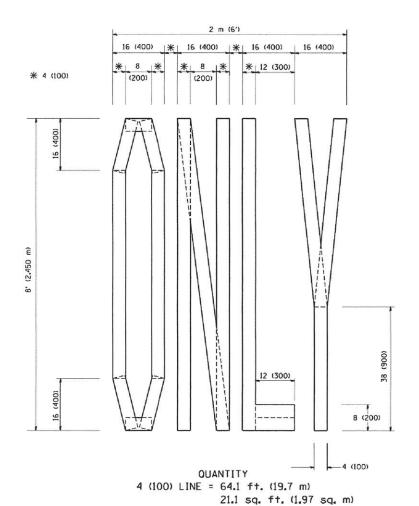
All dimensions are in inches (millimeters) unless otherwise shown.

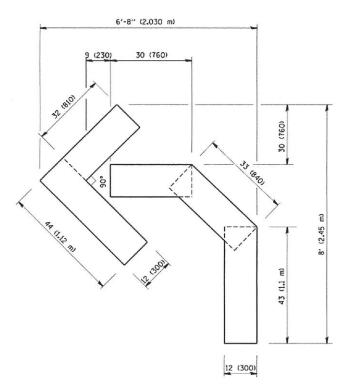
USER NAME = footem, DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 wi\\ILØ84EBIDINTEG.illan ents\IDOT Offices\District 1\Projects\Dis ORAWN\CADData\CADsheets\tc13.dgn REVISED - C. JUCIUS 07-01-13 PLOT SCALE = 50.000 '/ in. CHECKED -REVISED - C. JUCIUS 12-21-15 DATE 03-19-90 REVISED -C. JUCIUS 04-12-16

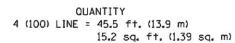
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

	DIS	TRICT OF	VE		F.A.U RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
TVD	ICAL DAY	/CAMENIT	MARKINGS		1461	16-00059-00-RS	DUPAGE	19	15
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SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

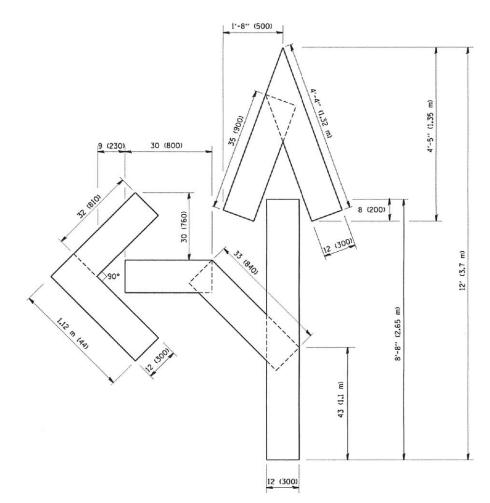
HRG HRG FILE PLO PEN







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.

COUNTY

DUPAGE

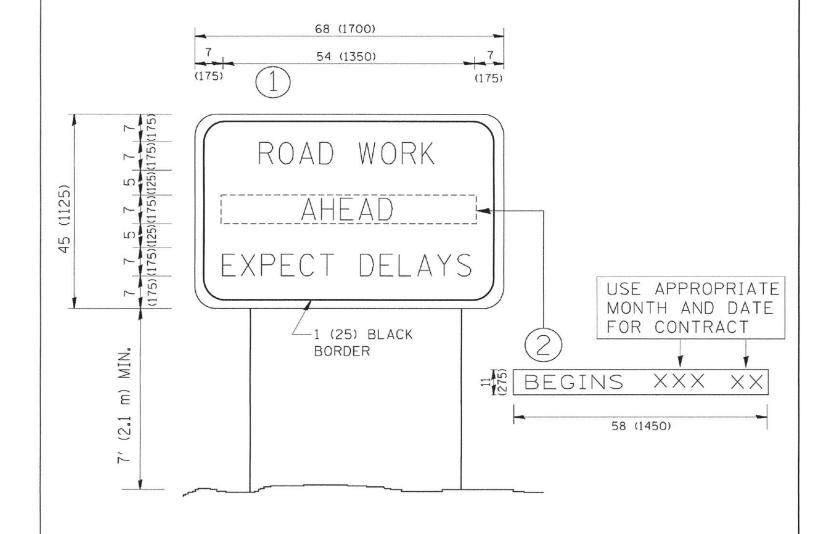
CONTRACT NO. 61C92

FILE NAME = USER NAME = gaglianobt DESIGNED REVISED -T. RAMMACHER 06-05-96 :\diststd\22x34\to16.dgn DRAWN REVISED -T. RAMMACHER 11-04-97 REVISED -T. RAMMACHER 03-02-98 PLOT SCALE = 50.0000 '/ IN. CHECKED PLOT DATE = 1/4/2008 DATE 09-18-94 REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION PAVEMENT MARKING LETTERS AND SYMBOLS 16-00059-00-RS FOR TRAFFIC STAGING FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT SHEET NO. 1 OF 1 SHEETS STA. TO STA.

HRG HRG FILE PLOT



#### 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 () WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

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

DUPAGE

CONTRACT NO. 61C92

FILE NAME:	429-sht-d
PLOT DRIVER:	R.pdf.bw.
PEN TABLE:	plotlabel.t

FILE NAME =	USER NAME = goglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
Wi\diststd\22×34\to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED ~	REVISED T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

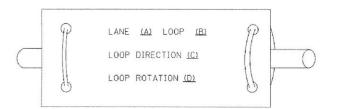
STATE	: OI	FILLINOIS
DEPARTMENT	<b>OF</b>	TRANSPORTATION

ARTERIAL ROAD	F.A.U. RTE.	SECTION	
INFORMATION SIGN	1461	16-00059-00-RS	
INFORMATION SIGN	TC-22		
SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAL	DIST. NO. 1 ILLINOIS FED. A

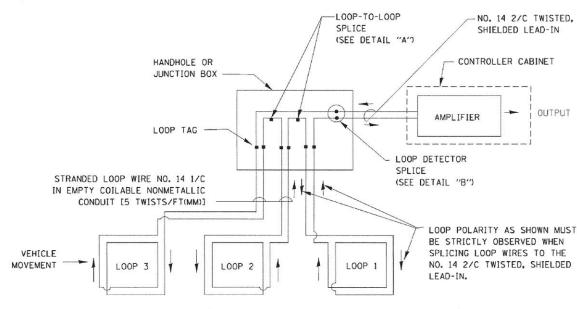
#### **LOOP DETECTOR NOTES**

- 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.
- 2. 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

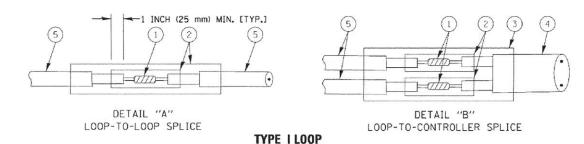


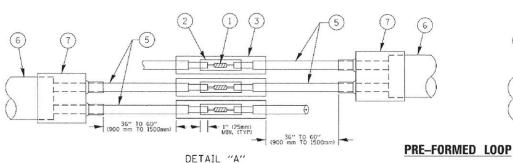
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



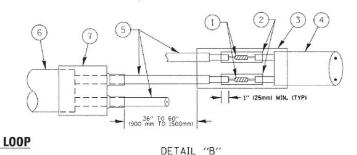
#### **DETECTOR LOOP WIRING SCHEMATIC**

- 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-TO-LOOP SPLICE



LOOP-TO-CONTROLLER SPLICE

#### LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

SCALE: NONE

- 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
- TREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

DUPAGE

DUPAGE 19 18 CONTRACT NO. 61C92

FILE NAME =	USER NAME = footemj	DESIGNED -	DAD	REVISED - DAG 1-1-14
c:\pw.work\pwidot\footemj\d0108315\ts05.	lgn	DRAWN -	BCK	REVISED -
	PLOT SCALE = 50.0000 1/10.	CHECKED -	DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -

STATE	OF	ILLINOIS
DEPARTMENT (	F 1	TRANSPORTATION

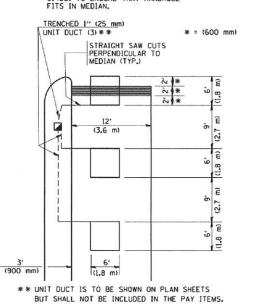
	DISTRICT ONE Standard Traffic Signal Design Details					F.A.U. RTE.	SECTION	
						1461	16-00059-00-RS	
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05				
	SHEET NO. 2	OF 7	SHEETS	STA.	TO STA.	FED. ROAD	FED. ROAD DIST, NO. 1 JULINOIS FED.	

### LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OF NON-PAVED SHOULDER H Ê (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT (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)

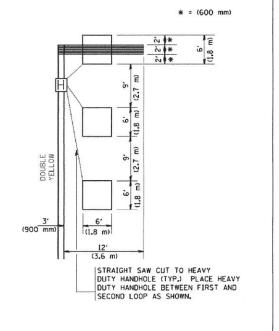
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE



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)

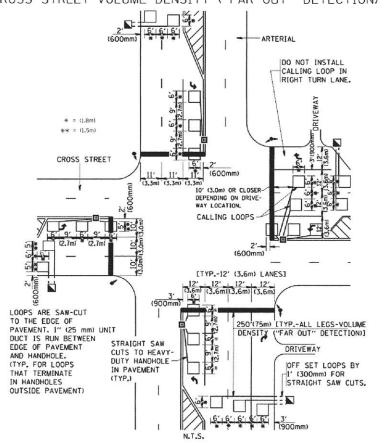


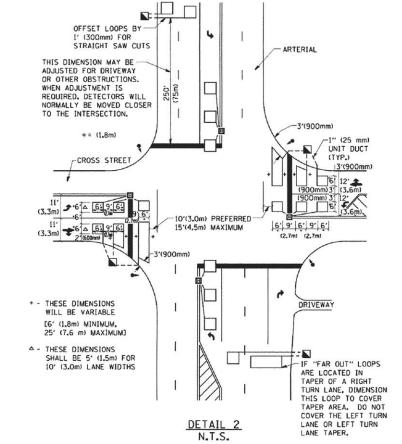
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

SCALE: NONE

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
- \* 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 (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. 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.

N.T.S. ILE NAME DESIGNED USER NAME = gaglianobt REVISED \distatd\22×34\ta07.dgn DRAWN REVISED PLOT SCALE = 50.0000 '/ IN. CHECKED R.K.F. REVISED PLOT DATE = 1/4/2008 DATE REVISED

DETAIL 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TOTAL SHEE SHEETS NO. COUNTY DISTRICT 1 - DETECTOR LOOP INSTALLATION 16-00059-00-RS DUPAGE 19 DETAILS FOR ROADWAY RESURFACING CONTRACT NO. 61C92 TS-07 SHEET NO. 1 OF 1 SHEETS STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT